

# JOURNAL OF THE ROYAL INSTITUTE *of* BRITISH ARCHITECTS

4th Series

Vol. 47

No. 2

11 DECEMBER 1939



*The R.I.B.A. Library*

## CONTENTS :

	Page		Page
JOURNAL .. .. .	25	OBITUARY :	
THE ARCHITECT'S TASK. The President .. .. .	27	MAURICE E. WEBB [F.] .. .. .	41
ASSESSMENT OF WAR DAMAGE TO PROPERTY .. .. .	29	CORRESPONDENCE .. .. .	44
BRITISH STANDARDS IN WAR-TIME. C. le Maistre .. .. .	30	NOTES .. .. .	46
CONTRACTS AND THE WAR .. .. .	33	MEMBERSHIP LIST .. .. .	46
THE TECHNIQUE OF SOUND INSULATION .. .. .	34	NOTICES .. .. .	48
REVIEW OF PERIODICALS .. .. .	39	COMPETITIONS .. .. .	48
		MEMBERS' COLUMN .. .. .	48

## Journal

### FEES FOR THE REPAIR OF WAR DAMAGE

The Officers of the Practice Committee have discussed with representatives of the Ministry of Health the question of fees to be charged to local authorities by architects employed on repairs of war damage carried out under the provisions of the Essential Buildings and Plant (Repair of War Damage) Act, 1939.

It has been agreed with the Ministry on behalf of the profession that for the first-aid repairs which would be necessary to make buildings immediately tenable after the damage has occurred the fee should be on a time basis at the rate of 10s. per hour for the time of either principal or senior assistant. It is considered that work of this nature should only be carried out by persons of this standing. This figure should include any necessary disbursements and clerical work in the

architect's office. This fee is provisional and subject to revision in the light of experience. The work would include the following as required by the local authority :—

- (1) (a) Making inspection and survey of damaged property on all floors. Certifying condition of drainage, water, gas and electric services if necessary. Entering full particulars in Survey Book, supplied by the Council.

Completing detailed information required on pages 1 and 2 of form "Report on Damaged Properties," and sending to Borough Council.

Filling in form W.D.P.1 Parts I and III, including report on damage to contents, and sending to Borough Council.

- (b) Meeting builder on the premises and giving instructions as to first-aid repairs required.

Supplementing with letter or brief specification if necessary.

Supervising work during progress.

- (c) Certifying completion of work. Checking accounts and certifying for payment.

Completing page 3 of form "Report on Damaged Properties."

In the case of more permanent repairs, it has been agreed that the fees would be as set out in A.R.P. Department Circular No. 110/1939, which is applicable in the case of architects employed by local authorities in respect of public air raid shelters. The services covered by these fees would include:—All the normal work preparatory to the obtaining of competitive or other forms of tender. Supervising work during progress. Checking accounts and certifying for payment.

#### A MAURICE WEBB MEMORIAL FUND FOR THE A.B.S.

*We wish to draw the following appeal to the sympathetic notice of members.*

DEAR SIR,—One of Maurice Webb's many activities for the good of others was in connection with the Architects' Benevolent Society of which he was hon. treasurer. He worked very hard for this Society and was personally responsible for many actions to raise funds for it.

We feel sure that many friends of his would like to do something in his memory which would have pleased him. Our suggestion is the raising of a fund to be handed over to the Architects' Benevolent Society as a "Maurice Webb Memorial" Donation.

Maurice Webb in recent weeks was very concerned about the Architects' Benevolent Society and the appeals likely to be made to it in the immediate future by members of the profession so badly affected by the war. What better could we do, therefore, to show our appreciation of him than to make an effort in his name to help this Society's work.

Donations, however small, from those who agree with our proposal, together with any correspondence, should be sent to: The Hon. Secretary, Maurice Webb Memorial Donation, c/o The Architects' Benevolent Society, 66 Portland Place, London, W.1.

E. STANLEY HALL (President R.I.B.A. and President A.B.S.).

E. W. WIMPERIS (Chairman, Arts Club).

R. ATKINSON (Vice-Chairman, Building Centre).

F. R. YERBURY (Hon. Secretary to Maurice Webb's Donation Fund).

#### AUXILIARY MILITARY PIONEER CORPS

The R.I.B.A. have offered their co-operation and assistance to the War Office in the recruitment of suitable officers for the newly formed Auxiliary Military Pioneer Corps.

It is thought that architects, with their specialised training, should be of particular value to this new unit. The responsible officers at the War Office have welcomed the Institute's offer to help, although it has been explained that the Corps is not a unit in which highly skilled technical services are especially required. It has also been explained that it is unlikely that officers accepted will be wanted for some little time. However, it is proposed to prepare a list of members who wish their names to be considered for commissions in the Corps. No one under the age of 40 will be accepted, and only those who are in Grade I or Grade IIA medical category will be eligible for service.

Members who wish their names to be considered are requested to submit them to the Secretary with any relevant information as to previous war service, etc.

Those whose qualifications are considered satisfactory will be required to register in the Army Officers' Emergency Reserve.

#### A.R.P. IN EVACUATION AREA SCHOOLS

The Board of Education Circular No. 1487 dated 23 November 1939, contains the scale of fees for consultants approved by the Professional Advisory Committee (Shelters) in connection with the employment of architects, surveyors, and engineers in connection with the survey of schools and preparation of plans and specifications for the work of protection.

Local authorities are urged to make use of consultants recommended by the Regional Professional Advisory Committees (Shelters). The scale of fees is as follows:

"(1) *Preliminary Inspection.*

To make an examination of the selected school and to report whether it is suitable for protection or not. If it is found to be unsuitable the fee for the work of inspection and for the report is to be £3 3s.

"(2) *Preparation of Plans and Specifications.*

If the school is found suitable for protection, to prepare plans, specifications and estimates in such detail as may be required by the Education Authority to enable them to proceed to let the contract. For this work the fee to be £5 5s. per 100 children for whom protection is to be provided, but not less than £5 5s.

"(3) *Supervision of the Work.*

To supervise the execution of the work and certify the accounts the fee in addition to (2) above is to be £3 3s. per 100 children for whom protection is to be provided, but not less than £3 3s.

The above fees are to be considered to be inclusive of all out-of-pocket and other expenses. The Committee understand that the scale of fees actually paid in each case will be a matter for arrangement between the Local Education Authority and the consultant employed, and that in exceptional cases and for work falling outside the scope indicated, special fees may have to be settled."

The circular goes on to state that the Board of Education are prepared to reimburse fees in accordance with this scale.

If fees in excess of these recommendations are contemplated, the prior approval of the Board must be obtained by the Local Authority.

It is interesting to note that the City of Salford Education Committee have already taken advantage of the scheme by the appointment of architects on about sixty of their schemes.

# THE ARCHITECT'S TASK

## The President

It has been suggested that I should write some message to the profession in place of an inaugural address. I would have wished that it could have been one of greater cheer. The times are out of joint: and there is none of the full-dress flutter which usually accompanies the President's first night. The contrast is all the greater because for the last two years the JOURNAL has published one after another the series of brilliant addresses which my predecessor has delivered both at the R.I.B.A. and at our Conferences and at various meetings of the Allied Societies. I suppose that in the whole history of the Institute we have never had an orator of such wit, such encyclopædic knowledge and such puckish humour as Mr. Harry Goodhart-Rendel. It was rightly said of him that he should have been the last of the line of Presidents because it is so impossible for anyone adequately to succeed him.

Yet, like the runner in the torch-race, he has finished his lap, and handed on the torch to me: if in him you witnessed the dash of a quarter-miler, in me I fear you will recognise the slower plod of the long-distance runner. Perhaps I have some claim to that title, since I first became an Associate Member of Council in 1913—the year before the last Great War—and my service to the R.I.B.A. has been almost continuous since the last war ended. Before me, my father, "Edwin T.," whom many older members still recall with affection, became an Associate in the year of my birth, and was Vice-President two years before I was elected an Associate. His first work for the R.I.B.A. was on the drafting of the Charter and Byelaws of 1887, and the term of his Vice-Presidency led up to the Charter of 1909, an important step towards the registration of architects.

You must forgive this personal note, but it means that my father and I have between us seen from a close angle the history of the R.I.B.A. during the whole of the second half of its career. One is tempted to look back and pay tribute to the great names of this era: but the war has intervened, and once again there seems likely to be a cleavage between the past and the future. What we have

done is a matter of academic interest: what we are going to do is a matter of vital importance. One reaction that emerges from the present time of inaction in the architectural world is the realisation that there is a great amount of architectural talent going begging, and behind it is a great desire to be of service. In spite of all that the Institute has done for many years to make known to the public the services that only an architect is trained to fulfil, the powers that be have failed to realise his value. They seem unaware that he is anything more than a draughtsman: they and the country with them have lost the advantage of skilled planning and co-ordination which is the architect's chief asset.

### ARCHITECTS AND RECONSTRUCTION

Architects yield to none in their keen desire to help to win the war. If, as seems likely, the "reserved" age will be raised, they will join up in whatever National Service is open to them, just as readily as they did twenty-five years ago. But while they are serving, those of us who are too old have a duty not only to them but also to the coming generation who will have to build again the fragments of a twice battered age. How best to do this is the task of the R.I.B.A. and we are engaged on adjusting ourselves to this task.

### OUR PLACE IN THE BUILDING INDUSTRY

In the first place, we must line up with the other members of the great building industry—engineers, surveyors, builders, operatives and merchants—we are all interdependent on each other, and none can function properly without the services of all. Even during the war period it is essential for the country's good that this great industry should remain vitally in being. In normal years its total annual output is £600,000,000, and it gives sustenance to nearly 2,500,000 persons. It contains the most skilled craftsmen in the world. We are endeavouring to ascertain the estimated requirements in labour and materials for all war work of every description. If it reaches an annual expenditure approaching the figure given above, then it will be clear that the whole building industry will be wanted for such efforts. Hardships must occur, and some luxury trades must

stand idle or turn to other employments. But if there is any substantial margin between war requirements and the normal output of the building industry, we are urging that something should be done to keep that money in circulation, to prevent the waste of idleness, of loss of goodwill, of reputable firms having to close down. We have been requested to keep our people in our employ: we have been warned that our incomes will be taxed to the limit. We are entitled to try to save the skill and talent among professional men, employers and operators. If the effects of the last war are any criterion, prices will almost certainly soar at the end of the war period, and essential buildings like schools and hospitals may cost more than half as much again as at present prices. If therefore such works can be advanced during the war, the country will be the richer at the end: and in any case it is most important to remember, in planning for that resumption, that architects, engineers and surveyors must prepare their work many months ahead of the restarting of actual building operations.

That is perhaps our immediate task—an endeavour to do all in our power to get the building industry on all its legs as soon as possible. Next, we must do all that can be done by forethought to prepare for normal times. This problem is difficult because we do not know what the havoc of war may leave. Of this, however, we may be sure: there will be a great break between post-war and pre-war standards, and a different outlook on life generally. Not only that, but materials will be scarce and prices will be sure to rise steeply: and it behoves us to prepare for such changes.

In our efforts now we must try to anticipate these difficulties. We are in close collaboration with the Watford Building Research Station in studies of this kind; and we are hoping that our research will investigate all possibilities of new materials and methods which may save expense.

#### EVACUATION PROBLEMS AND SOLUTIONS

Other problems that we can foresee are those arising from the evacuation scheme. After three months' working of the boarding-out system, the difficulties and shortcomings are becoming apparent. Clinics and dispensaries, nurseries and central dining rooms are indicated as a likely necessity. It is vital that any proposals to meet these needs shall fit in with a long-term policy such as holiday schools and holiday camps, so that the work now carried out may be of permanent value. In this matter we are in touch with the Ministry of Health: we have asked to be allowed to help in any architectural way to solve the problems which have been presented to them. In the matter of air-raid precautions, those that have been taken have yet to be tested. Possibly they may be found to be adequate: possibly more invulnerable shelters will be required. Looking towards the future, I am doubtful whether air-

raid precautions, as we understand them, will be wanted. Either this war must be carried to such a point that it may be patent that no future aggressor will be tolerated, or the destructive elements will be made more and more powerful, so that any standards that we set to-day would be quite out of date and useless in the future.

#### PLANNING AND REFORM

As an alternative, we can devote ourselves to the wider constructive problems of peace. Is there a reasonable alternative to the large cities and massed populations? We know their disadvantages—overcrowding, lack of air, traffic congestion and the like. We know the causes in the past—convenience of centralisation, nearness to ports and railways, etc. But we have been forced to some extent to a centrifugal policy, and it would be well to see whether such a policy cannot be made permanent. When one remembers that the average traffic speed in London is eight miles an hour, while the average speed in the open country is five times as great, we can discount some at least of the advantages of close centralisation. One is tempted to hope also that the emergency migration of children to the country may encourage among town dwellers a love of country life. These and similar problems we are hoping to study. A small nucleus committee is engaged in drawing up a programme for investigation. They will set a series of tasks for various groups to examine in detail. Such tasks will range from the larger problems of satellite towns, traffic distribution and resurrection of derelict areas, to more intimate investigations of household equipment and economy, design of pottery and glass, information on the relative costs and merits of floor and wall materials and such-like: and in building research we shall try to elucidate the mysteries of damp walls, cracks in plaster, peeling and blistering paint, dry rot, and the other bugbears of the building world. The results will be, we hope, of real value in approaching the new constructive era.

Meanwhile the essential matter of architectural education must go on. It is gratifying to find that all the important schools are carrying on with up to seventy-five per cent. or more of their normal numbers. I only hope that they will not be crippled by the loss of key members of their staff, because their work is of national importance. At the R.I.B.A. we have just held the intermediate examination for which there were 145 candidates: and there are 163 students sitting for the final examination. A conference to discuss the whole of the future of architectural education was to have been held this session. Unfortunately many important members of that Committee are unavailable, so that the conference must be postponed.

In a review of our immediate future, we cannot fail to realise that there will be much hardship and distress among architects young and old. My letter published in the *JOURNAL* and other papers appealing for contri-



butions to the Architects' Benevolent Society has already brought in some donations for which we are extremely grateful. One reply from a student deserves to be published in full. It says:—

"During the depression of 1930-31, I had the misfortune to be unemployed for a considerable time and the letter from the President of the Institute in the current issue of the JOURNAL has reminded me that I received some financial assistance from the fund then opened to relieve need in the Profession. In spite of staff reductions owing to the war emergency I have been retained for the time being on the staff of a Local Authority, and I should like to show my sympathy in a small way at least with my colleagues who have not been so fortunate. I have therefore asked my bankers to remit to you on the 31 December, 1939, and thenceforth quarterly until further notice, the sum of £1 10s. If I am able to add to this from time to time I shall certainly do so in thankful remembrance of the time when help was given to me."

It still remains incredible that the total number of subscribers is only about ten per cent. of the profession. All registered architects will shortly be receiving a

personal appeal to contribute a special Christmas donation, from which we hope to raise £1,000. I earnestly hope that many members will make that donation an annual subscription.

At 66 Portland Place we miss the normal contacts with our Allied Society members both on the Council and on Committees. It has been a great pleasure to see at the Executive Committee meetings four out of the six country members. I have been trying by letters to the Allied Society Presidents to keep them posted in our doings. I am sure of the strength of the R.I.B.A. for national good and am conscious that this strength rests upon the united efforts of metropolitan and provincial members to combine in stressing the services of our Institute to the public. Quite clearly we must speak with one voice in all our public dealings. Any matters of internal adjustment can be made without affecting our united action.

## ASSESSMENT OF WAR DAMAGE TO PROPERTY

### LITIGATION AND PROFESSIONAL SERVICES

The following is a brief summary of the interviews and correspondence between officials of the Board of Inland Revenue and the Presidents of the R.I.B.A., the Chartered Surveyors' Institution and the Auctioneers' and Estate Agents' Institute during the past three months.

On 22 September Mr. Healing (P.S.I.) sent a letter to all Government departments, including the Board of Inland Revenue, urging that private firms of surveyors might be utilised by Government departments in preference to the suggested method of calling upon individuals to serve in a temporary capacity on the technical staffs of the departments.

On 26 September, the three Presidents were all present at a Committee of the Board of Inland Revenue, and took the opportunity of having an informal conversation on this matter of giving out work to private firms of architects and quantity surveyors.

On 2 October, a second meeting was held with Mr. Bradford, Sir Harriss Firth and Mr. Paton, of the Board of Inland Revenue, and the three Presidents. On that occasion, Mr. Stanley Hall pointed out that in December, 1938, we had prepared a list of firms throughout the country who would be able to help in this matter. This list was made with the help of the President of the Allied Societies, and was subdivided by towns and areas. At this meeting it was found that the Board's plans were based on a system of full-time employment of individuals on monthly engagements, the individuals being ear-marked and only called upon after damage had occurred; and they would be dismissed at the end of the engagement. The Presidents were asked to show (1) how remuneration would be calculated if the work were given out to firms; (2) how it would compare in cost with the Government scheme; and (3) how the District Valuers would retain complete control.

On 6 October, a conference was held at the Surveyors' Institution, which was attended by representative bodies of the three Institutes, the R.I.B.A. being represented by the President, Mr. L. S. Sullivan, Mr. Geoffrey Wilson and Mr. Charles Woodward. As a result of the decisions reached

at that meeting, cogent arguments were put forward by the three Presidents of the employment for private firms at a meeting held at the Board of Inland Revenue on 11 October. It was pointed out that firms could be employed on an hourly, instead of monthly, basis; that staffs of firms, being under the direct supervision of their principals, offered a flexible efficient and economical method of dealing with an emergency; and that the employment of firms would not only maintain the continuity of professional units in war-time but would also avoid spasmodic employment of assistants under Government authorities, with their consequent dismissal when the particular work was done. The Presidents pointed out that panels of such firms were already, or could be made, available all over the country: that each District Valuer could draw on the panel, and could employ each firm with uniform instructions. They also suggested a specified fee on an hourly basis, which, it was claimed, would effect a saving of public money.

A final meeting was held on 26 October, and on 31 October the following letter was received from Mr. W. V. Bradford, a secretary of the Board, in which he said that the system designed by the Board was inevitable, whether individuals or firms were employed. Paid service in all cases would have to be arranged by monthly periods. The Board could not accept the President's scheme though they would consider the possibility of detail improvements in their own.

On 7 November, the President replied, recapitulating the advantages of employing private firms, and the difficulties which would arise on the Government method of seconding assistants from offices into temporary service under the District Valuer; and a similar letter was sent by the President of the Surveyors' Institution.

Mr. Bradford replied that the case was particularly one, in view of the uncertainties attending it, in which the Board wished to preserve freedom as regards the enlistment of professional assistance, however tendered, according to the development of events.

In these circumstances it is felt that each member must decide for himself what action to take.

## BRITISH STANDARDS IN WAR-TIME

*By C. le MAISTRE, C.B.E., F.C.G.I., Director, British Standards Institution*

During the past few years the British Standards Institution has received much valuable help from the architectural profession in carrying forward the programme of national standardisation.

Architects desire, and, indeed, require, the utmost freedom in dealing with their designs; yet there is perhaps no profession to whom industrial standardisation, properly organised, can be so useful. Architects will agree there is one factor which has always been common to the finest architecture, namely, soundness of materials. This is as apparent in ancient Athens as, for instance, in the Battersea Power Station; and the British Standards are more than anything else concerned with the quality of materials.

Steam and electricity have given us high-grade machinery, which, through standardisation and mass, or quantity, production, has brought many modern utilities within the reach of practically everyone. The astounding contrast between the output of manual labour and modern machinery may be illustrated by the fact that machines can now be made which are said to have nine million times the output of the average man working an eight-hour day. The fact that the thousands of valves in our radios, the millions of electric lamps in their sockets, the electric irons and the plugs for their use, the gas mantles, or the sparking plugs and the nuts and bolts in our motor cars in the vast majority of cases fit as they are intended to is entirely due to standardisation.

Modern industry is so complex that it necessitates the use of an enormous variety of materials. The mere examination of the size or weight of a product or article will not tell you its value; quality cannot be judged by personal inspection alone. Inevitably some sort of yardstick or standard is necessary to enable purchasers to form a proper estimate of the value of the materials or products offered for sale.

### Functions of the B.S.I.

The British Standards Institution, the national standardising organisation, working under a Royal Charter with Government support, for nearly forty years has prepared and issued such yardsticks, the British Standards, with the complete confidence of industry and without any Government control. These are arrived at, not by coercion, but as the result of meetings where all interests directly concerned are represented. It is true manufacturers have for years standardised their own processes and products, but few factories are entirely self-contained and so

industrial standardisation has passed quite naturally from individual factories to whole industries, and finally, in order to obviate overlapping of effort and to gain the maximum of efficiency and economy, it has become a national effort with a central co-ordinating influence, namely, the B.S.I. British Standard Specifications are used by the great purchasing departments of the Government, by the Crown Agents for the Colonies, by the London County Council, by municipal and local authorities throughout the country as well as by many other large purchasers. They are well known in the Dominions overseas and in foreign countries.

### The Scope of British Standards

The range of activity included in the term "industrial standardisation" is enormous, and nearly 1,000 British Standard Specifications which have so far been issued include such subjects as the testing of the performance of steam turbines, radio interference and the method of counteracting it, metal containers for food-stuffs, non-skid road materials, steels for bridges, for buildings and for aircraft, the vitamin testing of veterinary products, the biological testing of butter, concert pitch, and a host of other subjects.

Industrial standardisation, important in times of peace, is even more important in war-time.

### Quality, Cheapness, Interchangeability, Speed of Production

It is sometimes said that the excuse for standardisation is cheapness and that mass production results in low quality. So it does sometimes, but by no means always. That kind of standardisation must not be connected or confused with the national standardisation carried out by the B.S.I. The soundness of the principles underlying the preparation of British Standards and the value of these national standards to industry has been abundantly proved during nearly forty years of practical experience.

As to the allegation that mass production necessarily results in low quality, that form of mass production based on a nationally agreed specification which has brought many modern utilities within the reach of practically everyone, and is therefore to be encouraged, is entirely dependent on a high degree of interchangeability which can only be obtained by high-grade machinery and a proper system of limit gauging.

Many instances could be given where mass production of component parts based on a judicious scheme of standardisation can be of the highest value in the

rapid production of complete units. During the war, when time is the very element of the contract, such mass production may become invaluable.

It is perhaps of interest to note that high quality unprotected by standardisation is liable to be injured by unfair trading, as in the case of branded goods, the position of which in many cases has been established through high quality and the expenditure of huge sums on advertising.

National standardisation, which sets up an agreed quality, certainly protects the reputable manufacturer against the unscrupulous competitor, and it may therefore be said that national standardisation is always constructive.

### Standards in War

In the last war some of the greatest successes were due to standardisation and some of the greatest tragedies were due to its absence.

The production of tanks is an illustration of successful standardisation whereby the component parts were manufactured in hundreds of factories thousands of miles away, and which, when assembled in the British Isles, fitted perfectly, and the same is true of the use of standards in aircraft production.

The standards which were brought to a high pitch of excellence in the last war are being kept fully up to date, thus maintaining the high quality of the materials employed in the manufacture of British aeroplanes.

The outbreak of war has naturally necessitated a careful review of the general work in hand from the aspect of its importance in war-time, and its value in the reorganisation consequent upon the re-establishment of industry when peace comes again.

Without in any way changing the principles of the B.S.I. or removing proper control, a certain curtailment of the usual procedure has been found advisable. In each of the sections a small executive committee has been formed under which a substantial measure of agreement has been reached regarding certain standards in preparation or under revision, and steps are being taken to make these available in the near future in some provisional form.

Reference to the last Handbook of the Institution will show that the B.S.I. has over 400 draft standards and revisions in various stages of preparation, but only those regarded by the Committee as necessary to industry under present conditions are being proceeded with.

### War-time Standards for the Building Industry

On the other hand the B.S.I. is actively engaged on work in connection with war-time supplies. Under an agreement with the Home Office a special series of British Standards is being prepared to meet A.R.P. requirements. An Advisory Committee to the Home Office, formed largely as the result of a deputation by

the Building Industries National Council to the Lord Privy Seal, has requested the B.S.I. to prepare certain standards relating to aggregates for concrete shelters, bituminous paint for the protection of steelwork, chemical closets, adjustable hinges and rubber gaskets for gas-tight doors, as well as petroleum jelly for sealing the doors. In addition, the Home Office has requested the B.S.I. to prepare specifications for electric lighting of air-raid shelters, light traps for shops, methods of providing various intensities of even illumination, A.R.P. signs, obscuration value for textile curtain material etc.

It must be remembered that whilst standardisation is a handy tool it is a bad master; it should not be imposed on industry from above but should come from within industry itself. The B.S.I., through its long experience and intimate contact with the manufacturers, forms a direct liaison between the Government and industry, and possesses all the machinery necessary to give effect to any rationalisation required.

### Post-War Problems

Prior to the war the B.S.I. had prepared a considerable number of specifications covering not only building materials but also building components such as windows, doors, stairs, mouldings, domestic appliances, drainage fittings and so forth. Several of these standards were incorporated in the model specification of the National Housebuilders' Registration Council. After the war, as recently pointed out by the *National Builder*, there will be a great shortage of houses and buildings of all kinds and descriptions, the construction of which will have been suspended during the war period. It will be most necessary to rehabilitate industries immediately in order that they may be able to absorb the demobilised soldiers and bring back into civil life the large numbers who have been temporarily diverted in connection with the war. Surely this is not an inappropriate time to give some attention to this reorganisation? It would obviously be invaluable if the field were surveyed and a number of appropriate specifications prepared both for units and materials, so as to facilitate future building operations on sound economic lines.

### Maintenance of Community Interest

It is perhaps well to reiterate that industrial standardisation, or more exactly national co-ordination of the many specifications for one and the same purpose, frequently differing only in unessentials, is only undertaken by the B.S.I. when it is in the national interest and is considered by industry to fulfil a generally recognised want. In arriving at these national agreements for standards of quality of materials, of performance or rating of machinery, of dimensions of component parts required for interchangeability, and of methods of test, the community interest of the purchaser and the producer are fully recognised and the principle of standardisation by consent of all interests directly concerned

is invariably maintained. The machinery and the procedure of the B.S.I. are such that no section of industry need fear that its views will not receive the fullest consideration or that a British Standard would be issued in the face of soundly based objection. In fact the B.S.I. provides standards drawn up by, and acceptable to, industry where such standards are required, without in any way limiting the special designs or materials required for the proper carrying on of any individual scheme.

#### Advantage to Architects of British Standards

Finally, it may be interesting to summarise some of the advantage to the architect of these British Standards. The Architect has merely to state that such and such a material is to be in accordance with British Standard Specification number so and so, thus obviating the necessity of his repeatedly writing lengthy descriptions in his own specifications. Then again, all the necessary tests, which are often of a nature involving specialised scientific knowledge, are fully described

in the specifications and the architect therefore has only to ascertain that the material is in accordance with the appropriate British Standard. He will have the assurance that he is specifying materials or articles of sound quality having due regard to the cost of production. Neither the contractor nor his client can cavil at the quality of the material specified, and the fact that British Standards have been followed would form a complete answer to any charge of technical negligence. The existence of British Standards for new materials gives the architect full confidence to make use of them, and as the British Standards are reviewed periodically, quoting the number of the specification will be sufficient to ensure being up to date.

In this brief review it has not been possible to consider in detail the many problems of standardisation confronting the architects, but the R.I.B.A. maintains the closest liaison with the B.S.I. and architects who have problems connected with standardisation can always be sure that their problems will be considered if they bring them to the attention of the R.I.B.A.

### BRITISH STANDARD SPECIFICATIONS FOR A.R.P.

The following Standard Specifications have been prepared by the British Standards Institution at the request of the Air Raid Precautions Department. These specifications are under constant review, and when necessary will be revised in the light of experience and research. Comments or suggestions for amendment should be addressed to The Director, British Standards Institution, 28 Victoria Street, S.W.1.

**BS/ARP 1. AGGREGATES FOR CONCRETE SHELTERS CONSTRUCTED IN SITU.**

This specification defines the proportions and grading of fine and coarse aggregates, and "All in" ballasts.

**BS/ARP 2. BITUMINOUS PAINT AND BITUMINOUS COMPOUND FOR THE PROTECTION OF STEELWORK.**

The purpose of the Specification is to define the general composition and properties of bituminous materials for the protection of steelwork used in A.R.P. schemes.

**BS/ARP 3. ELECTRIC HAND-LAMPS.**

This specification covers electric hand-lamps for general use out-of-doors or in buildings in which the windows, roof-lights, etc., are not screened.

**BS/ARP 5. CHEMICAL CLOSETS FOR USE IN SHELTER ACCOMMODATION.**

This specification deals only with chemical closets as such. It does not specify methods of disposal, which must necessarily vary with local conditions. Such conditions must be taken into account when selecting the type of closet to ensure that there will be no harmful effect on water supply, or on the sewers, the sewage disposal system or other means of disposal.

**BS/ARP 6. SHELTER LIGHTING FOR SHELTERS FOR 50 PERSONS.**

General requirements for three conditions :—(a) where no mains

supply is available, (b) where A.C. main supply is available, and (c) where D.C. main supply is available. The specifications provide all details of equipment and maintenance of systems, which may also be used on a pro rata basis for shelters accommodating up to 200 persons.

**BS/ARP 7. ELECTRIC LIGHTING OF REPORT AND CONTROL CENTRES.**

This specification gives the general requirements for normal and emergency lighting, with some particulars of a suitable generating plant.

**BS/ARP 10. RUBBER GASKETS FOR RENDERING DOORS AND WINDOWS GAS-TIGHT.**

**BS/ARP 11. ADHESIVE TAPE FOR GAS-PROOFING, ETC.**

**BS/ARP 12. PETROLEUM JELLY FOR SEALING GAS-TIGHT DOORS, ETC.**

**BS/ARP 14. WINDOW BLIND MATERIAL (PAPER).**

**BS/ARP 15. LIGHT LOCKS FOR SHOP ENTRANCES.**

This specification prescribes the essential features of the design and installation of "light-locks," which term is used to define a means whereby persons may enter or leave shop premises during black-out periods when no visible light must emerge from the interior of a building.

**BS/ARP 16. METHODS OF PROVIDING EVEN ILLUMINATION OR LOW INTENSITY (0.002 FT. CANDLES).**

**BS/ARP 19. ADJUSTABLE HINGES.**

The construction and attachment of hinges intended for use on flush doors fitted to close against the face of frames, to enable adjustment to be made after the doors have been fixed in position. There are two standards for 1½ in. and 2 in. doors.

**BS/ARP 20. METHODS OF PROVIDING EVEN ILLUMINATION OF LOW INTENSITY (0.02 FT. CANDLES).**



## CONTRACTS AND THE WAR

### The Contractual Problems Confronting the Building Industry as the Result of the War

At a meeting of the Joint Contracts Tribunal held on 10 October, 1939, the representatives of the Royal Institute of British Architects of 66 Portland Place, W.1 and the National Federation of Building Trades Employers, of 82 New Cavendish Street, W.1, discussed and reviewed the contractual problems confronting the building industry as the result of the war. In so far as such problems are due in whole or in part either to the inability to obtain adequate supplies or to the increase in the prices of materials or to the uncertainty created in the minds of the parties through the lack of any provisions in the contract in regard to war risks, the Tribunal, as authors of the R.I.B.A. 1939 Standard Form of Building Contract and of the revised edition of that Form issued in 1939, considered it desirable that some authoritative recommendation should be issued for the purpose of giving such guidance as might prove of general assistance towards the equitable solution of these problems as they may affect any particular contract.

In considering the general principles upon which any recommendation of the Tribunal should be based, they have not thought it within their province to express any views upon the strictly legal aspects of such problems as may arise. They appreciate that these will depend upon the specific terms of each contract and that such legal questions as may be involved will result from the particular circumstances of each case. They have, however, approached the matter not only with the knowledge that in a number of instances building work has been held up because of uncertainty, but also upon the assumption that it would not be the desire of either party to insist upon the strict letter of his contractual rights to the detriment of the other, but rather to arrive at an equitable arrangement for the completion of the works or the termination of the contract as the parties may desire.

The Tribunal therefore recommend that where the prices of materials and goods to be used in the building works have been increased owing to the war or where wages have risen, the nett cost actually and necessarily paid by the contractor due to such increases in the prices of materials and goods or rises in wages after the outbreak of war should be reimbursed by the building owner, but that no profit should be allowed to the contractor upon such extra cost. Any delay that may be caused by difficulty in obtaining material or labour or otherwise due to the emergency and unforeseen con-

ditions that have arisen should be met in any case by an extension of time.

The question of loss or damage caused by hostile action to buildings in course of erection has also received the attention of the Tribunal. In so far as it would appear that any compensation for war damage to buildings which might be paid under any scheme which might be drawn up by the Government would be paid to the building owner as owner of the land upon which the buildings were being erected, the Tribunal considered it equitable that the building owner should assume liability for such damage in respect of the works upon his land which, of course, as attached to his land are in his ownership, but that the responsibility for any loss or damage to plant, equipment or tools, being in the ownership of the contractor, should remain with him. Further, the Tribunal desire to recommend that in the event of the contract works being destroyed or damaged by hostile action the employer would have the right thereupon to determine the contract upon the terms that the contractor be paid the proper value of all works executed and all materials delivered prior to the happening of such event, including the works or materials so damaged or destroyed. The compensation to the owner would be such as the scheme of the Government may prescribe.

The Tribunal puts forward the above recommendations as providing a basis upon which an agreeable settlement of present wartime contractual difficulties in respect of pre-war contracts may be reached in a manner fair to both parties.

The Tribunal recognise the need for carrying on the normal business of the country so far as compatible with the public interest and it is hoped that the application of the general principles set forth in this recommendation may have the effect of not only continuing works already contracted for, but also of encouraging the undertaking of such new building works as may be possible having regard to the conditions created by the present emergency.

The Tribunal also desire to record their view that the general principles enunciated above should be applicable not only to private contracts, but also to cases where a local authority or other public body is the building owner and instructions have accordingly been given that the terms of this recommendation be brought to the notice of those responsible for public building works.

## NOTES FROM THE INFORMATION BUREAU OF THE BUILDING RESEARCH STATION\*

*This is the last instalment for the time being of the Series previously published as loose insets to the R.I.B.A. JOURNAL and entitled "Questions and Answers."*

# THE TECHNIQUE OF SOUND INSULATION

## PART I.—RIGIDLY CONTINUOUS STRUCTURES

### Preliminary

In common with many other laboratories throughout the world, the Building Research Station, in conjunction with the National Physical Laboratory, has devoted considerable attention in recent years to the problem of sound transmission in buildings. Much further research remains to be done, but it has been felt that the essentials of the subject are now sufficiently well understood to make possible comprehensive recommendations for practice and a report giving practical recommendations for builders and architects has been prepared.† The purpose of this note is to give, so far as is possible within short compass, an indication of the methods of treatment now recommended which will be dealt with more fully in the report.

Before proceeding to discuss these methods of treatment, it is important to emphasise that success must always be dependent on the wise initial planning of a building. For instance, to place a room which will inevitably be noisy next or above sleeping apartments is to introduce from the start serious difficulties, which may well render uneconomical any form of treatment that can be suggested. Another point is care in the choice of equipment. Quietness in operation should always be a factor in the selection.

### Transmission of Sound

For the practical treatment of sound transmission in buildings, it is necessary to distinguish between what is termed "air-borne" sound, and "impact" or "contact" sound. "Air-borne" sound is that which starts as a vibration in the air, e.g., speech, the wireless, etc. "Impact" or "contact" sound starts as a vibration in the building structure, caused, may be, by a footstep on a floor, or a blow with a hammer. The distinction is important, because insulation against the two types of sound needs separate consideration and treatment.

Air-borne sound may be transmitted throughout a building along continuous air paths, through open doors, windows, or even the narrow crack round a poorly-fitting door—for that may allow the passage of a large amount of noise.

Air-borne sound may also be transmitted by the walls and

floors themselves, for they will be set in vibration and pass on the vibration to the air on the other side. With a solid wall, the amount so transmitted depends only on the weight of the wall per unit area, but it is to be noted that doubling the weight does not halve the transmission, as might perhaps be thought at first sight; the relation between the amount of sound transmitted and the weight of the wall is not so simple—a fact which is important in considering practical treatments. For example, the difference between the amount transmitted by an eighteen and a nine-inch wall is very small and can only just be detected by the ear.

It should be made clear that the statement that the amount of air-borne sound transmitted depends only on the weight applies only to solid walls, e.g., solid brick walls, breeze blocks, etc. Double constructions, such as insulated cavity walls and stud partitions markedly surpass in sound insulation solid construction of equal weight.

A further point is that it is useless to attempt to insulate two rooms by merely having a heavy or highly efficient partition between them. The common flanking walls and floors are also set in vibration, and if any of these are of light construction they will provide a ready path for the sound from one room to the other. This is illustrated in Fig. 1 accompanying this note.

The major effect resulting from the weight relationship is the imposition, in effect, of a limit to the insulation of air-borne sound, which can be economically achieved so long as the structure is rigid and continuous. The economic limit of efficiency is approximately that which obtains for 9 in. brickwork, or its equivalent in weight. To surpass this by an amount which the ear can appreciate involves the use of impracticably heavy construction, since all indirect, as well as direct paths, must be treated.

Impact sounds differ from air-borne sounds not only in their origin, but in the fact that much more energy is imparted to the structure by the impact of a blow than by that of a sound wave in air. Owing to the very large amount of energy involved, it is impracticable to obtain the necessary insulation in structures by increasing weight and rigidity. It can only be obtained by introducing structural discontinuity. Footsteps, for instance, are best insulated by floating floors, which are discontinuous constructions.

\* Crown Copyright Reserved.

† *Sound Transmission in Buildings. Practical Notes for Architects and Builders.* H.M. Stationery Office. In the press.

DIAGRAMMATIC INDICATION OF HOW  
AIR-BORNE SOUND TRAVELS IN A  
CONTINUOUS BUILDING STRUCTURE

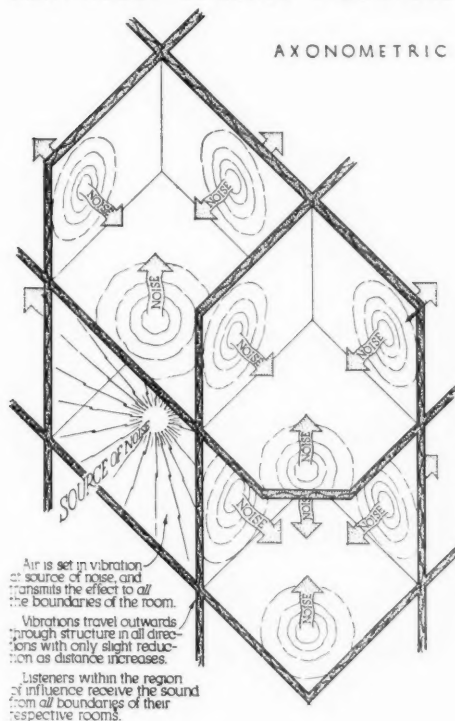


Fig 1

For practical purposes, the types of structure which will provide any specified degree of insulation can be determined quite simply by the use of diagrams (nomograms) incorporated in the report above mentioned. These nomograms are intended to simplify the diagnosis and treatment of practical cases, and designedly avoid, to that end, reference to the physicists' units of measurement, the *phon* and the *decibel*, which, though necessary for the scientific development of the subject, are apt to be confusing to those who have no occasion to be constantly using them.

Some important practical cases will now be considered for the purpose of indicating the practical methods of analysis and treatment which have been developed. The basis of the analysis will in both cases be the particular nomogram which is reproduced with this note (Fig. 2).

EXAMPLE 1.

*It is proposed to place a room for conferences next to an existing office where typewriters, comptometers, and so on, are being used. What standard of construction is necessary to deal with the normal occupancy conditions?*

The normal extreme of noisiness in the typing office can probably be considered to be comparable with the area marked "Noisy Office" in the left-hand column of the nomogram.

In the right-hand column is a point marked "Discussions (Board Room)," which, no doubt, will fit closely enough the degree of quiet required.

A straight-edge placed between these two areas indicates, on the centre scale, that a construction such as a stud partition, plastered both sides, would be adequate, or anything equivalent in weight to  $4\frac{1}{2}$  in. brickwork for either the direct or indirect paths.

EXAMPLE 2.

*In a projected hotel building, what is the construction required for adequate sound insulation between any two rooms?*

The normal extreme occupancy conditions on the noisy side would be comparable with the region in the left-hand column marked "Average Office: Normal Conversation," while the quiet-requirements should approximate the conditions for "Study or Sleeping" in the right-hand column.

A straight-edge laid between these two points indicates that a standard equivalent to 9 in. brickwork is required.

In practice, this might be thought to be impractical for partitions, and, therefore, consideration has been given to solutions providing equal insulation, but involving less weight than 9 in. brickwork. The suggestions that have been made, while quite simple, cannot be dealt with in the short space available here. It is thought that they will give satisfaction in practice.

Impact sounds, such as footsteps, would also be important in a problem of this kind. Another nomogram is given in the report to deal with this aspect, and various types of floor, both of timber and of concrete, which will reduce sound transmission, are indicated.

It will be observed that in both these cases, insulation greater than that which is readily obtainable in rigid continuous structures is not required, and very simple structural precautions may, therefore, be entirely sufficient to deal with such problems.

EXAMPLE 3.

*It is proposed to construct a block of flats, and it is desired to provide adequate sound insulation between any two flats.*

The extreme conditions in any flat would probably be comparable with "Noisy Office: Fairly loud wireless music," or even higher on the left-hand scale. The degree of quiet to be provided will correspond to the peak on the right-hand column.

A straight-edge laid between these two regions on the scales indicates, on the central column, that a standard of construction approximating six feet or more thickness of brickwork is needed. This is, of course, an entirely impractical construction; but it will be observed that there is a nearby point marked on the scale as "Special Construction: Discontinuous," and this has been set at approximately the level of insulation achieved in an experimental building on the grounds at the Building Research Station, where discontinuous constructional methods have been tried.

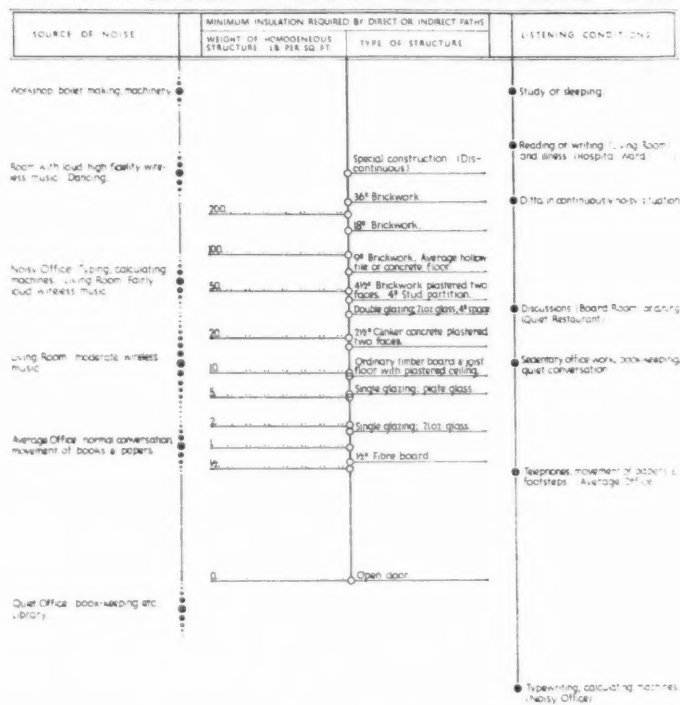
Since the introduction of suitable discontinuities is apparently the only way to circumvent the limits of insulation, inherent in continuous structures, every effort has been made to find practical ways of effecting discontinuities. Some success has attended these efforts, and it is now possible to suggest practical treatments for almost all problems of sound insulation. It is, however, impossible to deal with this aspect of the problem in the first part of this note, and it will, therefore, be discussed in Part II, which will follow.

### Summary

A summary of the major indications made thus far may be useful:

- 1) Of first importance is the fact that there is a limit to the insulation of air-borne sound which can be achieved in rigidly continuous structures. Roughly speaking, the limit is somewhere between what might be expected from  $4\frac{1}{2}$  in.-9 in. brickwork. Where impact noises are concerned, or where greater insulation of air-borne sound is required, the principle of "discontinuity" must be applied.
- 2) For a large number of easy cases, sound insulation within the limit of continuous structure is sufficient. The essential condition to be borne in mind for these cases is that insulation of air-borne sound depends primarily on weight. It follows from this, that porous, lightweight, highly absorbent materials, often useful for heat insulation, do not offer any special advantages in this method of sound insulation. The requirements for heat and sound insulation must not be confused. It is possible that a solution for the problem of sound insulation will prove beneficial in regard to heat insulation as well, but the converse is not necessarily true.)
- 3) In general, the best approach to the problem of sound insulation in rigidly continuous structures is, first to determine the degree of insulation required, and the weight and type of structure which will satisfy the conditions, and secondly, to plan with these requirements in mind. Finally, each path by which sound may travel should be checked to make sure that each is up to the required standard of resistance. In this way economy and efficiency will best be attained.

DIAGRAM TO DETERMINE APPROXIMATELY THE ADEQUACY OF BUILDING STRUCTURES TO INSULATE INDOOR AIR BORNE NOISES



#### HOW TO USE DIAGRAM

- 1) Decide maximum amount of noise likely to be made in room which is considered as source of noise and find the appropriate point on the scale in the left hand column.
- 2) Decide minimum conditions likely to exist in listening room and find the appropriate point on the scale in the right hand column.
- 3) Join the points so determined in the two outside columns by a straight line. The intersection of this line with the centre scale shows approximately the adequacy of various structures which may be common to both rooms to give a satisfactory degree of quiet in the listening room. Any structure falling below this point of intersection should be adequate only falling below it, inadequate.
- 4) A structure not listed in the centre column can be roughly placed by determining its weight per sq. ft. of superficial area or by consulting BUILDING RESEARCH Special Report No. 26.

NOTE: This diagram is based upon average sound reduction values for the average listener. If the noise source contains dominant low frequencies, transmission will be slightly greater than indicated. Allowance should be made for this and for the listener's sensitivity to noise.

Fig. 2

## PART II.—DISCONTINUOUS CONSTRUCTION

### Preliminary

In the first part sound insulation in *Rigidly Continuous Structures* was discussed, and reasons were given why it was impossible to achieve an insulation in such buildings greater than that which one might expect from, say,  $4\frac{1}{2}$  in. brickwork. It was also shown that while this was sufficient for certain types of occupancy, there were many cases where it was not adequate and that recourse must then be had to a new method—the introduction of discontinuity.

In this second part it is proposed to give some account of the investigations into the construction and behaviour of discontinuous construction, and to describe briefly one or two of the applications of the new technique recommended for practice.

### Experimental Work

Very early in the joint researches by the National Physical Laboratory and the Building Research Station it was realised that experiments on *individual* walls and floors could never by themselves lead to a comprehensive solution of the problem, since it was known that, in some cases at least, a great deal of sound travelled by indirect paths in buildings, of which such tests took no account. It was decided, therefore, that it was necessary to carry out tests in a building in which all the paths for sound transmission could be controlled and studied. Fortunately, about this time a very suitable light steel-framed structure in the grounds of the Research Station became available, and the opportunity was seized to commence work there.



The building has two stories, and at present the basic structure consists of the light steel frame, floors and roof of pre-cast hollow concrete blocks, and outside walls of  $4\frac{1}{2}$  in. brickwork. Stairs are provided on a frame detached from the building.

Up to the present time, the experimental work has involved the construction of two rooms on each floor, each with a single large window and double doors. These rooms were the special feature of the building, for they were, of themselves, complete boxes, resting on rubber blocks, and thereby detached as completely as possible from the structure and from one another. The floors of the rooms were of concrete, of the floating type patented by the Research Station\*; the walls of the rooms (as distinct from the outer walls of the building) were of clinker concrete blocks, plastered, and were carried upon the floating floors; the ceilings were of two-coat plaster on wood laths, carried by wood joists which were, in turn, supported by the box walls of the room. Windows and doors were double, the inner elements in each case being in the box structure, and the outer in the building frame itself.

The insulation which was achieved between neighbouring rooms, vertically or horizontally, with the building in this state, was of a very high order indeed, being equivalent to some six to ten feet thickness of brickwork, although the total actual weight of the structure had not been materially increased. From the nomogram given in Part I of the note it will be apparent that insulation of this order is far superior to that obtainable in "continuous" structures.

Various modifications were then tried, directed to simplifying the structure without losing this high insulation. For example, it was found possible to dispense with double doors and windows in certain cases without sacrificing any appreciable degree of sound insulation. At the present time, studies are being made of ceiling constructions. Later, additional work will be done on the floors and it is hoped to achieve further simplification in this direction.

It should perhaps be mentioned that the idea of a box-like construction is by no means a novel or untried one. For example, reference is made by Davis and Kaye in their book *The Acoustics of Buildings* to a case where the idea was carried out quite successfully in a building erected as long ago as 1913. What is new in the recent work is the study which has been made under controlled conditions of the possibilities of this type of construction or of the general methods of introducing structural discontinuities, with a view to advancing fresh recommendations for construction which would be within the region of practical politics, depending on the circumstances of different types of cases.

The tests made with this building have made it possible to visualise treatments of varying efficiency for all types of problems where an insulation in excess of that obtainable in rigidly continuous structures is required, and in the report now in the press suggested applications of the technique have been described to deal with such typical problems as flats, hospitals, semi-detached houses, and so on.

\* British Patent No. 466,044.

In addition to this, sufficient information of a fundamental character is given to enable architects readily to devise other treatments for individual problems which arise. It is not possible to describe in full here the suggestions for treatment of any of the problems dealt with. The following, however, may serve to indicate the approach which has been adopted in dealing with one or two of them.

### Examples

#### 1. SEMI-DETACHED HOUSES

Normally sound is transmitted not only by way of the directly intervening party wall, but by the common walls which form the front and rear of the houses. For this reason any superficial treatment of the party wall alone is doomed to failure. This path, of course, is one which has to be treated with others and the obvious procedure seems to be to divide the party wall into two separate leaves, and to interrupt the continuity of the common flanking walls at this point.

Methods for doing this are shown in the accompanying diagram (Figure 3), together with details for the treatment of

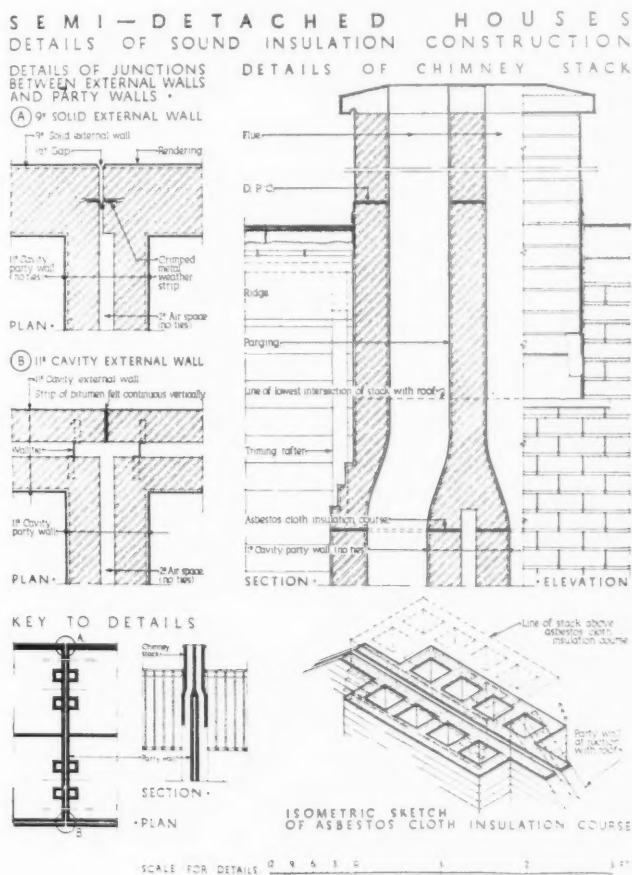


Fig. 3

the party wall and its junction with the outer walls, whether the latter are of solid or cavity construction. The larger detail deals with the point where the chimney, divided by the cavity in the party wall, is joined together above a layer of resilient asbestos cloth just below its junction with the roof.

These are the essential details of the discontinuous construction in this case, but lesser points such as (a) the division of foundations, (b) the treatment of windows in cavity walls, and (c) points of planning and general design must be taken into account if success is to be achieved.

It may be of some interest to mention that, at the present time, one builder is constructing several semi-detached houses along the lines recommended in an endeavour to provide adequate sound insulation at less than the cost of a comparable detached house. The Station proposes to examine the houses when they are finished.

## 2. HOSPITALS.

Hospitals will, perhaps more than most buildings, present markedly individual problems in each instance. For this reason the recommendations made are, of necessity, rather in the nature of generalisations.

Roughly speaking, it may be said that hospitals require to be carefully "zoned" in planning, as experienced hospital architects are well aware. The wards are commonly a region where quiet is demanded, and where the noise sources are not usually intense, while the kitchens and various offices are usually sources of considerable mechanical noise, although a high resistance to penetration of sound from outside is not necessary.

In the "quiet zones" probably the requirements for air-borne sound insulation are within the limits for rigid continuous structures and can thus be easily dealt with (see Part I of this note), and impact sounds, which might be a nuisance, can be adequately dealt with by the use of a floating floor.

In the "service zones" also the requirements of insulation are probably within the limits for rigid continuous structures.

Between the two regions, however, it is quite probable that insulation of a higher order will be required, and for this purpose a discontinuity should be introduced into the structure.

The accompanying diagram (Figure 4) illustrates these points both in general in the two upper sketches, and in detail beneath, where methods are shown for closing the cavity which would have to be provided to interrupt the structure. These details are of considerable importance in practice, since, comparatively speaking, a very small amount of rigid contact can entirely destroy the insulation provided by a large area of cavity construction. Closing the gap around a single doorway with rigid materials would, for instance, damage the insulation over perhaps the whole of the area of the cavity. The cavity should apparently be treated throughout as an expansion joint in the building. In some cases, of course, this may be a useful function quite apart from sound insulation.

In hospitals occasions may arise where a single room or group of rooms where there are sources of noise may have to be placed in the midst of a quiet zone. These could be treated like the box constructions described earlier in connection with the experimental work. Details for the simple construction on the treatment of flats, which, again owing to the limitations of space, cannot be dealt with here. Such constructions offer, of course, a very high degree of insulation.

## Conclusions

From this second part of the note three important deductions can be made which might well be added to the summary given in Part I.

Firstly, it will be obvious that *in practice the solution of the problem of sound insulation is primarily in the hands of the architect* and is not merely a question of applying "sound insulating materials." Such special materials as the architect will need from time to time will be required essentially for their property of resilience, and for the rest his principal aids are the ordinary structural materials, and within reason the simpler and the more robust these are, the better they will serve his purpose.

## HOSPITALS & OFFICE BUILDINGS DESIGN & CONSTRUCTION FOR SOUND INSULATION

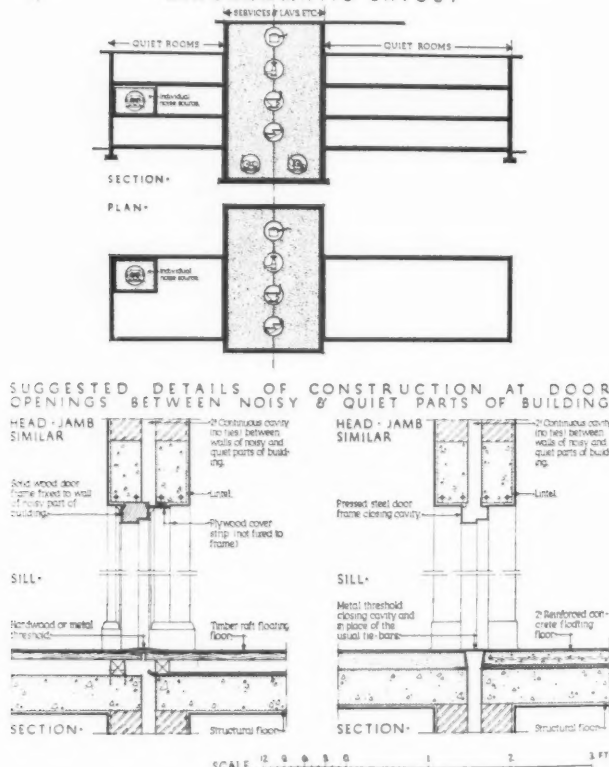


Fig. 4

Secondly, the demonstrated principles of sound insulation and the suggestions for practice which have been made are both so comprehensive that it seems highly probable that efficiency and economy will be best served by considering them in the earliest stages of the design of a building. In some cases, perhaps, planning alone may then be sufficient, or a few changes in constructional detail, but in others it seems

likely that best use of the ideas can only be made if they are allowed to operate as a function of the design.

Thirdly, the technique of discontinuous construction properly used can provide insulation of a very high order, adequate, in fact, for almost any conceivable noise problem, but involving, on the whole, very little intricate or heavy construction.

## Review of Periodicals

This review refers to the more important articles in journals received by the library. Journals are not in the loan library but some articles can be photostatted at the reader's cost. Information about prices and publishers of journals will be given by the librarian.

### SCHOOLS

R.I.B.A. JOURNAL. 1939. 18 September. P. 967.  
Botanic Public Elementary School, Belfast, for 550 senior pupils, by R. S. Wilshire [F.].

ARCHITECTS' JOURNAL. 1939. 17 August. P. 246.  
School for 360 senior boys, 360 senior girls, 384 children, and 240 infants at Bognor Regis, by C. G. Sillman [F.].

ARCHITECT AND BUILDING NEWS. 1939. 25 August. P. 216.  
Edenberry Public Elementary School, Belfast, by R. S. Wilshire [F.], accommodating 768 pupils.

THE BUILDER. 1939. 1 September. P. 361.  
Technical Institute, Hendon, by W. T. Curtis and H. W. Burchett [FF.], comprising departments of engineering, commerce, and domestic subjects, library, assembly hall, gymnasium, etc.

BUILDING. 1939. September. P. 370.  
Mixed senior elementary school for 360 children at Baldock, Herts, by Julian R. Leathart [F.].

OFFICIAL ARCHITECT. 1939. October. P. 917.  
Goldenhill Infants' School, Stoke-on-Trent, for 200 infants and 40 babies, by J. R. Piggott [A.].

ARCHITECTURAL RECORD (NEW YORK). 1939. August. P. 87.  
Valuable section dealing with advanced standards of high school design, with plans, photographs and analyses of five typical American schools. Good data is given on administrative areas, classrooms, recreation, etc.

BYGGMÄSTAREN (STOCKHOLM). 1939. No. 30. P. 372.  
Results of a competition for an agricultural college.

### MUSEUMS AND EXHIBITIONS

ARCHITECTURAL FORUM (NEW YORK). 1939. August. P. 115.  
Excellent plans and photographs of the Museum of Modern Art, New York, by Goodwin and Stone.

ARCHITECTURAL RECORD (NEW YORK). 1939. August.  
Examples from the New York World's Fair, showing circulation, light control and flexibility in the organisation of space.

PENCIL POINTS (NEW YORK). 1939. September. P. 615.  
Article on modern methods of display for works of art, by T. F. Hamlin, dealing particularly with the Museum of Modern Art and the New York Historical Society.

ARKKITEHTI (HELSINGFORS). 1939. No. 8. P. 113.  
Article by Alvar Aalto on exhibitions, and a number of excellent illustrations of his Finnish Pavilion at the New York World's Fair.

DAS WERK (ZURICH). 1939. No. 9.  
Special number on the Swiss National Exhibition, with good photographs of the interior display.

### LIBRARIES

ARCHITECTS' JOURNAL. 1939. 10 August. P. 200.  
Small public library at Sealforth, by J. R. Fothergill and G. R. Mason [A.].

LIBRARY ASSOCIATION RECORD. 1939. October. P. 504.  
Bitterne Branch Library, Southampton.

KENTIKU SEKAI (TOKYO). 1939. No. 8. P. 33.  
Article by Harold A. Dod [F.] on the growth of the modern library.

### GOVERNMENT

ARCHITECT AND BUILDING NEWS. 1939. 20 October. P. 58.  
New Government offices, Edinburgh, by T. S. Tait [F.].

### CIVIC

ARCHITECTS' JOURNAL. 1939. 28 September. P. 421.  
ARCHITECT AND BUILDING NEWS. 1939. 29 September. P. 325.  
The Guildhall, Cambridge, by C. Cowles Voysey [F.].

ARCHITECTS' JOURNAL. 1939. 2 November. P. 548.  
ARCHITECT AND BUILDING NEWS. 1939. 3 November. P. 109.  
Greenwich Town Hall, by Culpin & Son [F./A.].

### HOTELS

ARCHITECT AND BUILDING NEWS. 1939. 15 September. P. 283.  
Hotel for commercial and holiday purposes at Rovaniemi, Finland, by P. E. Blomstedt.

TÉR ÉS FORMA (BUDAPEST). 1939. No. 8. P. 147.  
Hotel with 250 beds in the Métra mountains, by Puskás and Uray

### OFFICES

ARCHITECT AND BUILDING NEWS. 1939. 25 August. P. 204.  
Royal National Lifeboat Institution, Elstree, by H. Kenchington [F.], comprising workshops and publicity department.

### MARKET

ARCHITECT AND BUILDING NEWS. 1939. 11 August. P. 164.  
Interesting multi-purpose public market at Clichy, Paris, by Beaudoin and Lods.

### ABATTOIR

ARKKITEHTI (HELSINGFORS). 1939. No. 4. P. 62.  
Slaughterhouse at Turku, by I. Ahonen.

### SHOPS

ARCHITECT AND BUILDING NEWS. 1939. 25 August. P. 211.  
Welwyn Stores, a two-floor building with over eighty departments and a restaurant accommodating 400, by Louis de Soissons [F.].

PENCIL POINTS (NEW YORK). 1939. August. PP. 471, 530.  
A number of recent American shops and restaurants, and data sheets giving dimensions of shop windows.

### BAKERY

THE ROYAL ENGINEERS' JOURNAL. 1939. September. P. 371.  
Full and informative article on Alexandra cold storage and bakery, Singapore, dealing with layout, operation of bakery, insulation of cold chambers and plant, operation of refrigerating and air-conditioning plant, electricity supply and distribution, electric motors and control gear, and details of erection and personnel.

**TRANSPORT BUILDINGS**

PENCIL POINTS (NEW YORK). 1939. September. P. 66.

Data sheets on requirements for petrol filling stations.

ARCHITECT AND BUILDING NEWS. 1939. 18 August. P. 187.

JOURNAL OF THE INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS. 1939. 29 August. P. 309.  
City of Birmingham Municipal Airport, Edmon, by Norman and Dawbarn [F.F.].

**WELFARE AND COMMUNITY BUILDINGS, CAMPS, ETC.**

ARCHITECTS' JOURNAL. 1939. 26 October. P. 524.  
Scheme for a children's holiday home at Beaconsfield, by Samuel and Harding [A.I.].

ARCHITECTS' JOURNAL. 1939. 26 October. P. 529.  
Evacuation and holiday camp for Dulwich College Preparatory School at Cranbrook, Kent, by Samuel and Harding [A.I.].

ARCHITECT AND BUILDING NEWS. 1939. 27 October. P. 88.  
Scheme for evacuation camps for mothers and children, by E. Goldfinger, Mary Crowley [A.I.], members of the A.A.S.T.A. Evacuation Committee, and Anne Parker [A.I.].

WOOD. 1939. October. P. 413.  
Timber camps for The National Camps Corporation, by Sir John Burnet, Tait, and Lorne. Good progress photographs and structural details.

**POLICE AND ARMY BUILDINGS**

ARCHITECTS' JOURNAL. 1939. 31 August. P. 298.  
Territorial Army Headquarters, Shepherd's Bush, by William G. Newton & Partners [F.].

ARCHITECTS' JOURNAL. 1939. 7 September. P. 329.  
Police Station and Section House, Tooting, by G. Mackenzie Trench [F.].

**HOSPITALS, ETC.**

ARCHITECTS' JOURNAL. 1939. 19 October. P. 498.  
Nurses' Home, Macclesfield General Hospital, by Frederick Gibberd.

ARCHITECTURAL DESIGN AND CONSTRUCTION. 1939. October. P. 357.  
Hospital for sick animals at Bievtes, France, by L. Hoa and E. and M. Utudjian.

ARCHITECTURE (SYDNEY). 1939. September. P. 179.  
New ward block accommodating 68-82 beds at the Royal Alexandra Hospital for Children.

**RECREATION BUILDINGS**

ARCHITECT AND BUILDING NEWS. 1939. 11 August. P. 167.  
Bandstand built out over the sea at Weymouth, by V. J. Wenning [L.].

ARCHITECT AND BUILDING NEWS. 1939. 15 September. P. 276.  
Public baths, Kingsway, Lancaster, by Frederick Hill.

ARCHITECTURAL DESIGN AND CONSTRUCTION. 1939. September. P. 329.

Reference section on sports buildings: indoor and outdoor swimming baths, Blackpool Casino, a greyhound stadium, sports pavilion, boathouse, and covered tennis courts.

JOURNAL OF THE INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS. 1939. 29 August. P. 301.

Article on grandstands for municipal sports grounds, by W. G. Douch.

**THEATRES, CINEMAS, ETC.**

ARCHITECTS' JOURNAL. 1939. 24 August. P. 273.  
Philharmonic Hall, Liverpool, accommodating 1,771, for use as a concert hall, cinema or place of assembly, by Herbert J. Rowse [F.].

ARHITEKTURA (PRAGUE). 1939. No. 7. P. 157.  
Article on music and acoustics, by A. Hasek.

ARHITEKTURA (PRAGUE). 1939. No. 7. P. 163.

The Legisbank building in Prague, by F. Marek, with large concert hall.

**RELIGIOUS**

ARCHITECTS' JOURNAL. 1939. 17 August. P. 241.

St. Mary's Church, Nottingham, by T. Cecil Howitt [F.].

ARCHITECT AND BUILDING NEWS. 1939. 18 August. P. 181.  
St. Martin's Church, Wolverhampton, by Lavender & Twentynman [F.A.].

**CREMATORIA**

OFFICIAL ARCHITECT. 1939. October. P. 920.

Crematorium for the borough of Rochdale, by S. H. Morgan.

**HOUSING**

R.I.B.A. JOURNAL. 1939. 14 August. P. 917.

Article on the administrative aspect of housing in Sweden, by Max Lock [A.I.].

ARCHITECTURAL RECORD (NEW YORK). 1939. September. P. 89.  
Section on low-rent suburban apartment buildings, with design data based on the experience of the F.H.A. Rental Housing Division. Good information is given on Wyvernwood Village, Los Angeles, and Interlaken Garden Apartments, New York, two large privately owned housing developments for "black-coated" workers.

**HOUSES**

WOOD. 1939. September. P. 394.

Timber house at Sutton, Sussex, by Connell, Ward & Lucas [A.I.].

ARCHITECTURAL FORUM (NEW YORK). 1939. August. P. 142.  
"The Ardmore Experiment," four-family speculative houses, by Frank Lloyd Wright.

ARCHITECTURAL RECORD (NEW YORK). 1939. August. P. 57.  
Two-family house on a city site in San Francisco, by R. Neutra. Steel and wood structure.

ARCHITECTURAL RECORD (NEW YORK). 1939. September. P. 41.  
Experimental low-cost house in plywood, by the John B. Pierce Foundation.

ARCHITECTURAL FORUM (NEW YORK). 1939. October.

Issue illustrating 101 recent American small houses.

BYGGMÄSTAREN (STOCKHOLM). 1939. No. 27. P. 341.

Interesting villa by Backström and Reinius, with good details of construction, flower window, etc.

ARKITEKTEN (COPENHAGEN). 1939. No. 7. P. 101.

A number of good small brick cottages.

**FLATS**

ARCHITECTS' JOURNAL. 1939. 5 October. P. 445.

Block of 110 flats at moderate rentals at Brixton Hill, by Couch and Coupland.

ARCHITECT AND BUILDING NEWS. 1939. 1 September. P. 240.  
Block of 12 flats at Crescent Grove, Clapham, by Mitchell & Bridgewater [A.I.].

**CONSTRUCTION**

EDUCATION. 1939. 27 October. P. 229.

Article on prefabrication for timber school buildings for evacuated children, by T. Mitchell [A.I.].

**EQUIPMENT: HEATING, VENTILATION, SANITATION, LIGHT AND SOUND, ETC.**

JOURNAL OF THE INSTITUTION OF HEATING AND VENTILATING ENGINEERS. 1939. September. P. 328.

Report of the study of the ventilation of a warmed room carried out at the Building Research Station, comparing the effects of an open coal fire, an anthracite stove, a normal gas fire, a radiant electric fire on the hearth, an electric unit heater in a corner of the room, and a hot water radiator under the window.

ARCHITECTURAL FORUM (NEW YORK). 1939. August. P. 131.  
Architectural acoustics: data aimed to cover all aspects of the question in a brief, understandable way: by S. L. Macdonald.

ARCHITECTURAL RECORD (NEW YORK). 1939. September. P. 77.  
Article on the control of light.



## A.R.P.

ARCHITECTS' JOURNAL. 1939. 12 October. P. 467.

Article on civil protection by F. J. Samuely and C. W. Hamann, supplementary to previous articles in June numbers of the *Journal*, and dealing with official publications which have appeared since then.

ARCHITECT AND BUILDING NEWS. 1939. 3 November. P. 106.  
Article on the repair, drainage, proofing, etc., of sandbag protection.

JOURNAL OF THE AIR RAID PROTECTION INSTITUTE. 1939. October. P. 2.

Report on the ventilation of air raid shelters.

OFFICIAL ARCHITECT. 1939. October. P. 922.

Article on the ventilation of air raid shelters, by F. H. Slade.

## TOWN AND COUNTRY PLANNING

ARCHITECTURAL FORUM (NEW YORK). 1939. August. P. 75.

Good section on the work of the Tennessee Valley Authority, dealing with the regional plan, dams, power-houses, communities, dormitories, houses, bridges, service buildings, and recreation.

ARCHITECTURAL RECORD (NEW YORK). 1939. August. P. 68.

Well illustrated article on landscape design in the rural environment, by Eckbo, Kiley and Rose.

DE 8 EN OPBOUW (AMSTERDAM). 1939. No. 16.

Town planning study of open spaces in Rotterdam.

## HISTORICAL

R.I.B.A. JOURNAL. 1939. 18 September. P. 975.

Article by Joseph Vago on the Danube suspension bridge at Buda-

pest, built during the nineteenth century by William Thierney Clark and Adam Clark.

L'INGEGNERE (MILAN). 1939. No. 9. P. 773.

Article on the military engineering of ancient Rome, by Luigi Crema.

L'INGEGNERE (MILAN). 1939. No. 9. P. 790.

Article on the architecture of Leonardo da Vinci, by A. Pica.

## BIOGRAPHICAL

BUILDING. 1939. October. P. 414.

Article on the work of the modern Dutch architect, S. Van Ravesteijn, by H. P. L. Wiessing.

## GENERAL

ARCHITECT AND BUILDING NEWS. 1939. 6, 13 and 20 October. PP. 11, 42, 64.

Three articles on "Soviet Architecture: the present phase," by Arthur Ling [A.].

ARCHITECTURAL DESIGN AND CONSTRUCTION. 1939. October. P. 354.

The first of a series of articles on architectural delineation, giving practical information on presentation, rendering, perspective, by R. Myerscough-Walker.

PENCIL POINTS (NEW YORK). 1939. July. P. 407.

Articles on architectural models and landscape models. Large number of good photographs, and very useful information on materials and tools.

## Obituary

MAURICE EVERETT WEBB, M.A. (CANTAB.), D.S.O.,  
M.C., F.R.I.B.A., F.R.S.A.

### A Memoir by Mr. H. M. Fletcher [F.]

Maurice Webb, elder son of the late Sir Aston Webb, P.R.A., was born on 23 April 1880, and was therefore fifty-nine years old when he died. He was educated at Marlborough and at Pembroke College, Cambridge. In 1902 he was articled to his father and later became his partner. He was thus in contact with and responsible for much architectural work on a large scale. At the outbreak of war in 1914, when he was President of the Architectural Association, he enlisted as a private in the Royal Engineers with forty other members of the A.A. His war service was distinguished; he served in the campaigns at Suvla, in Serbia, at Salonica and in Palestine. He attained the rank of Major, with the distinctions of D.S.O. and M.C.

On his return in 1919 he resumed practice with his father, and in spite of the heavy demands of his architectural work he gave ungrudgingly of his time and thought to the service of the profession. How highly this service was valued was shown by the responsibilities which he was constantly called upon to shoulder. In particular the work which he did for the Board of Architectural Education gave proof of a largeness of vision and a statesmanlike grasp of essentials rarely to be found among professional men and none too common in the sphere of national affairs. His membership of the Board lasted for years and he was Chairman from 1925 to 1927. During this period the constitution of the Board was radically altered and its basis so broadened that it became a new thing, and it is not too much to say that the inception of this change was directly due to Webb's imaginative prevision, and its bringing about to his powers of administration. In the

early years of the century the Board had consisted of members of the Institute with the addition of certain outside architects, such as T. G. Jackson and Basil Champneys. During the war it was narrowed down, largely through force of circumstances, till there were none left but R.I.B.A. members. Webb felt that although architects might be conversant with the details of architectural education, and some of them might have a comprehensive conception of it, there was a great deal for them to learn about the principles and practice of the science of education in general. So in the Board as it was re-constituted under his leadership were included representatives of the Universities, the Public Schools, the Board of Education, as well as of more closely allied bodies, such as the teachers in Technical Institutions, in Art Schools, the Royal Academy, the Art Workers' Guild and so forth. The result was a Council of some 70 members, a number which at first sight seems unwieldy. Actually it has worked out as Webb intended—the policy and execution is controlled by the architect members, but the others are of high value in advising or warning and in acting as direct liaison with Government and other authorities on the many occasions where a personal is preferable to an official approach. Of all the works which Webb carried through for the profession, this is probably the one of greatest benefit and that which will endure longest as a solid memorial to his ability.

It was Webb, too, who instituted the Visiting Board, the small Committee of the Board which visits every architectural school in the country once in two years, investigating, suggesting improvements, interviewing governing bodies, reporting and tightening up. He had a rare power of gauging almost at first sight the condition of a school, whether it was running smoothly and sweetly or was suffering from slackness or excessive friction, and in the latter case with a few searching

questions he could usually put his finger on the source of trouble. Without pretensions to profound scholarship or teaching ability he was a born organiser of education.

He was President of the Architectural Association in 1914. The Presidency which was broken by the war years was resumed by the wish of the whole Association in 1919-20, and the welfare of the A.A. was always near to his heart.

He first became a member of the R.I.B.A. Council in 1920, and was Vice-President in 1927-29 and again in 1933-35. He served on the Councils of the Architects' Benevolent Society, the Artists' General Benevolent Institution and the London Society, and was Hon. Treasurer of the A.B.S. from 1928 onwards. He was Chairman and one of the founders of the Building Centre. He founded the Cambridge Architects' Club, a body of architects who are also Cambridge men, with the primary object of helping the Cambridge School of Architecture through the difficult post-war years.

His practice was large and varied, and among the buildings for which after his father's death he was solely responsible may be mentioned the Guildhall at Kingston, the Commercial Union Assurance building in Cornhill, the reconstruction of the Army and Navy Stores, Messrs. Bentall's Store at Kingston, part of the Whiteley Homes at Walton-on-Thames, the restoration of the Cloisters and Entrance Gate of St. Bartholomew the Great, and the new Master's Lodge and other works at Pembroke College, Cambridge.

If one were asked to name the leading quality of Maurice Webb's character it would be generosity. He was large in body and mind, and it is noticeable that the causes to which he devoted all his powers were those of the young and the unsuccessful, embodied in the Board of Architectural Education and the Architects' Benevolent Society. Every kind of subterfuge was abhorrent to him; when he had made up his mind that a certain object was desirable he pursued it with the utmost directness, and it was no doubt this simplicity of purpose which gave him his power as a leader of men. The vehemence which often accompanies generosity sometimes arouses opposition in smaller natures, but in his case it attracted far more than it repelled, and it was impossible to feel enmity towards a speaker so sincere, so persuasive that mere persuasion turned into eloquence. The gathering at the memorial service held in St. Bartholomew the Great proved the affection which he inspired in all sorts and conditions of men, and the moving tribute by Canon E. S. Savage expressed the feeling of all who knew him.

#### From Sir Ian MacAlister

May I add a few words to the appreciations of Maurice Webb which appear in your columns. I watched his career for over 30 years and had the privilege of working with him for a long time.

"Maurice," as he was to all his friends, was a very remarkable figure, and his position in the architectural profession was in some ways unique. He had wonderful natural gifts. He was a born leader of men, if ever there was one. On any committee or in any gathering he took the lead at once, not by thrusting himself forward, but by the sheer force of his personality.

He was, perhaps, the most persuasive speaker I have ever heard. When he had expressed an opinion it just seemed impossible not to agree with him. He was a great organiser. Whenever he came in contact with any official machine he

grasped its weaknesses and its potentialities and seemed instantly to see what was wanting to make it more efficient. He was a very fine soldier and his peculiar gifts for organisation and leadership marked him out almost from the moment he enlisted as a private in the Royal Engineers a quarter of a century ago. It is a tragedy that he is lost to us just at a moment when those gifts might have had wider scope.

#### From Major General H. C. B. Wemyss, D.S.O., M.C.

It was my privilege to serve with Maurice Webb during a large part of the last war.

For many months in the trying conditions of Macedonia our mess was reduced to two or three, and the opportunity of appreciating each other was unique.

Later in Palestine I was in a different unit and could observe his value and success as a commanding officer.

He had started as a sapper in a branch of the Royal Engineers which is now the Royal Corps of Signals.

It was an entirely new life and the work was different to anything he had experienced. In three years he was commanding the unit as a major, and received distinctions that showed how eminently successful he had been.

To those working in close touch with him, however, his success was not surprising, as he had those essential qualities that go to make a good soldier—common sense, thoroughness, and "drive," coupled with that greatest virtue, a love of his fellow-men.

This he showed in the way that, ever since the war, he kept in touch with the men of his unit. As recently as last March we mustered over 60 strong, gathered from all over the country.

On these occasions the first words one heard were "Where is Webb?" as everyone looked for his tall and handsome presence. Alas, the next time that we assemble it will be so different.

#### From Mrs. E. H. Smith, who as Miss E. H. Mann was Secretary of the A.B.S. for many years.

No record of Mr. Webb's life would be complete that did not give some consideration to his work for the Architects' Benevolent Society.

Side by side with his larger reforms for raising the status of the architectural profession went his care for his less fortunate fellow-members, and his unremitting efforts to help them and enable them to keep their foothold in an uncertain world.

Though these schemes were on a smaller scale than some of his other professional activities, they had none the less great importance for a number of people. They were significant, too, as showing his consciousness of the interdependence of the whole of the architectural profession, and his sense of man's common humanity, which made him unwearied in urging on those who had prospered in the exercise of their calling to give a helping hand to others who had been less successful, or who were even, by force of adverse circumstances, in actual want.

Mr. Webb brought the same vision, enthusiasm, and vitalising energy to all his enterprises, and a power of constructive imagination and organisation that ensured their success.

He initiated more than one Christmas appeal that greatly increased the Society's funds, and in 1923 inaugurated the

A.B.S. Insurance Scheme, which adds hundreds of pounds annually to the Society's income for distribution in pensions and grants.

In the economic slump of 1931-1933, when building came almost to a standstill, and so many architects were unable to follow their profession, Mr. Webb was the original moving spirit behind the highly successful Architects' Unemployment Scheme, which collected over £10,000.

It was characteristic of his sympathetic understanding that, in drafting the appeal for subscriptions to this fund, he should emphasise that the money was but the necessary means to a more important end: to provide employment of such a nature that the architects in the scheme could keep in touch with their profession and, while freeing them from the more pressing of their financial worries, give occupation to "hand and eye and brain," without which a man may come to feel his usefulness is ended.

With the country again at war, the architectural profession is facing difficult times. There will be hardship and suffering and a crying need for help. But this time Webb will not hear.

#### From Mr. Theodore Fyfe [F.]

Other pens have written of Maurice Webb's numerous activities and of what he achieved for the profession by his amazing energy and single-hearted devotion. Mr. Yerbury has dealt ably with most of it in the *A.A. Journal* for November. Webb's work for the Cambridge School is well known, but something of enduring value which gave him a place in the list of benefactors to his University deserves special mention—the splendid collection of architectural books which he purchased from Mr. Robert Atkinson and presented for the use of the School. Though there are many good modern books, the valuable quartos and folios of the older masters which architectural students find so difficult of access, most of them in their original leather bindings, form the major portion of the collection. The whole bequest is worth several hundreds of pounds, but in his letter to the Vice Chancellor of 26 May 1933, published in the *Cambridge University Reporter* of 13 June following, Webb stated that Mr. Atkinson had co-operated by reducing the prices of the volumes below their real value. By Grace of 17 June 1933, the University accepted the gift and gave facilities for its proper housing in the Library of the School of Architecture. The specially designed book plate in each volume reads "Ex Libris Robert Atkinson June MCMXXXIII Presented to the University of Cambridge for the use of the School of Architecture by Maurice Webb." It is peculiarly appropriate to call attention to this at the present time, when the Bartlett School of London University is sharing the premises of the Cambridge School, and the number of students who use the School Library—a good one in other respects—is greater than the normal.

#### From Mr. G. D. Gordon Hake, R.W.A. [F.]

May I add a tribute to the memory of Maurice Webb? Others who knew him more intimately will put on record his many sterling qualities and energetic interest in both the R.I.B.A. and the A.A., but I should wish, from personal knowledge, to give an appreciation of his real interest in architectural education as typified by the support and encouragement which he gave to the Royal West of England Academy School of Architecture, Bristol, during the difficult early years of its existence.

It was his presence and influence on a deputation to the

Board of Education which turned the scales in favour of a financial grant which put the School on its feet. He came to Bristol to plead privately for endowment, and assured us that he was always ready to help if called upon.

To me personally this assurance was a tremendous encouragement when such encouragement was most needed.

Maurice Webb always had a warm corner in his heart for the Bristol School, and was, I think, glad to know that his early interest had been so fully justified.

#### MAURICE WEBB

Maurice Webb was born in 1880, the eldest son of Sir Aston Webb, P.R.A. His education was at Marlborough and Pembroke College, Cambridge, and in his father's office which he entered in 1902 to serve his articles. After qualification he joined Sir Aston Webb in partnership; and after his death carried on the firm's work under the title of Sir Aston Webb & Son.

During the war, 1914-1918, Webb served with distinction in the Royal Engineers in the Near East, winning the M.C. and the D.S.O. He returned to practice in 1919 and almost immediately became president of the A.A. for the second time. He was elected F.R.I.B.A. in 1919 and in the same year started his service on the R.I.B.A. Council, and his remarkable period of service on R.I.B.A. committees.

The following is, as shortly as possible, his record of service for the R.I.B.A.: Council member 1919-22, 1923-24, 1929-39. Vice-President 1927-29, 1933-35. U.K. representative on Council at various times of the Institute of South African Architects, the Royal Australian Institute of Architects and the New Zealand Institute of Architects. Board of Architectural Education: Chairman 1925-27, Vice-Chairman 1920-22, 1923-25. He served on the following principal R.I.B.A. committees, among others: Executive, Art, Aerodromes, Revision of Charter, Official Architecture, Premises, Centenary, and on the R.I.B.A. Visiting Board and the Thames Bridges Conference. He was a member of the Registration Council Board of Architectural Education 1932-38, of the A.B.S. Council with two two-year intervals only between 1920 and his death, and was Hon. Treasurer 1928-39. He served on the A.A. Council 1912-21 and was President in 1914-15 and 1919-20. He was also a member of the Kensington Borough Council. Among other public or semi-public appointments which he held Maurice Webb was a Governor of Christ's Hospital, and of the Westminster Hospital, vice-chairman and hon. architect to the Homes for the Aged Poor. He received the freedom of the City of London in 1932 and was a liveryman of the Drapers' Company.

The following list is of works by the firm built since 1918:—Additions to Greenwich Mills; house at Noordwyk, Holland; War Memorial and hall, Leys School, Cambridge; buildings, Whiteley Village, Burhill; Dover Patrol Memorial; Bank of Chile, Santiago; Memorial, London Troops, Royal Exchange; Textile Trades War Memorial; Evelyn Nursing Home, Cambridge; Royal Air Force Club, Piccadilly; Stock Exchange War Memorial; rebuilding of 36-44 Moorgate; Kensington, Fulham and Chelsea General Hospital; Birmingham University extension; The Russell School, Ballards, Addington, Surrey; Wesley Hostel, Cambridge; Army and Navy Stores, Victoria Street; Artillery House, Westminster; Howell's School, Denbigh, N. Wales; head office of Ocean Accident and Guarantee Corporation, Ltd.; new premises of the Commercial Union Assurance Co., Cornhill; Sebright's School, Wolverley, near Kidderminster; Abbey Flats, Abbey Road, St. John's Wood, N.W.; Government House, Nicosia, Cyprus; Bentall's New Store, Kingston-on-Thames; New Guildhall, Kingston-on-Thames; Depository Building, Kingston-on-Thames; "Gas Industry House, 1 Grosvenor Place; new flats, "The Grampians," Shepherd's Bush (in conjunction with Colcutt and Hamp); new sanatorium, Howell's School, Denbigh, Wales (in conjunction with Col. G. Griffiths); Crematorium, Honor Oak.

The work of the firm is being carried on under the same name as previously—Sir Aston Webb & Son—by the surviving partner, Mr. Edward Playne [A.].

## Correspondence

### FRANK LLOYD WRIGHT

22 Suffolk Street,

London, S.W.1.

5.12.39

To the Editor, JOURNAL R.I.B.A.

SIR,—I had begun a humble contribution to the Frank Lloyd Wright affair when the word Marxian was applied to the pattern of his philosophy by a writer in the JOURNAL: but I desisted—it seemed a little discourteous to our visitor. But now that Mr. Wright has written and Mr. Gloag has spoken, something may be said. Mr. Gloag is really to blame. For years he had punctuated nearly all of his delightful writings and talks on architecture with the three magic monosyllables; he had built up a wonderful legend, and then, when the Prophet was to be displayed, Mr. Gloag skipped off to America without acting as producer, with that inimitable flair for publicity for others which he possesses. Never has a Prophet been worse treated by his disciple; perhaps he thought the figure so impressive (as indeed it was) or the English architectural public so stupid that no preparation of utterance was needed. For I can tell Mr. Gloag that "Romantic" was one of the milder descriptions used. This gives some measure of the disservice which Mr. Gloag's doubtless unavoidable absence in America did to his Prophet.

Perhaps Mr. Gloag had suggested the titles of the four discourses, which promised a closely argued philosophy. He should have carefully supervised their contents as well. For there was a first-rate audience, receptive and highly favourably disposed. But Mr. Wright, the descendant of preachers, forgot that he was not at home! The extempore preacher relies upon his own congregation, which glows as each disjointed phrase falls from the beloved lips: excellent phrases, true fragments of doctrine (often, of course, contradictory); but how worthless for the stranger who has come to listen, in search of a rule of life. And we were nearly all strangers. . . .

When the first Lecture dried up abruptly after half an hour's talk, punctuated by the declaration of independence (a credo enunciated a quarter of a century ago) enlivened with some well-worn jokes at renaissance architecture (with a singularly inept comparison of St. Peter's emergency chain with St. Paul's nicely calculated reinforcement) and enhanced by the display of an impressive personality, I said to myself: "Ah, the Rheingold, the preludian opening of the Tetralogy! The Leitmotifs will be woven into a coherent pattern, the whole will be presented, not indeed as a formula (or reach-me-down) but as a vast cosmology; and for a conclusion, instead of the Twilight of the Gods, the Dawn of a new Era."

The second Lecture quickly dispelled any such illusions. The prophet-preacher had clearly made no preparation for his sermons. He gave us first some pretty, flimsy but architecturally completely unsatisfying moving pictures made by one of his "Boys" (those gilded youths that seem to swarm in the Arizona desert); then a further instalment of the Rhein- maiden's song, whose haunting strains again intoxicated the

few Complete Wrighterians present (no development, no emergent Siegfried); and, lastly, to eke out the time he called for questions. This part was the least satisfactory: the questioners were mostly young and serious and they very thoroughly searched his material. Mr. Wright, who has a distinct gift for wisecracks, set himself to score off them and to raise a laugh at their expense, which he easily did. But he didn't face up to a single point and the questioners showed great restraint and politeness under equally great provocation. Mr. Gloag cannot have heard these questions or he would not have thought (if these are the reactions to the Lectures he refers to) that there was any attempt to belittle or misunderstand Mr. Wright. It was a genuine desire for elucidation of the Lecture which was displayed.

There were, perhaps, two special features that caused puzzlement in the audience. Firstly, the paradox that an architect doesn't need to learn anything: schools are useless—go straight into the country and build: but remember you must be equipped with all the latest scientific knowledge of materials and their possibilities; secondly, the difficulty of applying Mr. Wright's theory of scattering the population over the face of the land (on the principle of the late Jesse Collings' Three Acres and a Cow) with the needs of industry and a densely populated country. Someone suggested afterwards that his system was specially designed and only suitable for the vast open spaces of Arizona. I myself was puzzled, though I did not dare to ask a question as to how the architecture of Democracy came into the picture, for he appeared to work for a clientele of millionaires. But perhaps in the Marxian future we shall all be able to afford Hollyhock Houses or Ranunculus Villas or, at any rate, Forget-me-not Flats.

But, seriously, the best antidote to these Lectures was a visit to the small but beautiful exhibition of the drawings of his buildings. It was there seen that Mr. Wright is a first-rate architect working in a rich and (in spite of Mr. Gloag) romantic medium, well tuned to a highly emphatic natural surrounding. The writer of a note in *The Times* who said that his buildings don't "suck up to the Landscape" seemed to me singularly to miss much of their merit. In one example the trees, the rocks, the rushing stream were all taken into consideration, even to the extent of preserving a surface of living rock for a hearthstone. In others he exploits to the full the contrast of textures and the juxtaposition of a geometrical form in an irregular surrounding.

No, sir, I repeat that Mr. Gloag is to blame for the misunderstandings that quite naturally occurred. He should either have kept Mr. Wright, a mythical figure, in his remote Arizona, or he should have carefully staged and produced him. Let us hope that in the book which we have been promised Mr. Wright will be able to demonstrate that he is a coherent thinker as well as a logical architect.

I am, sir,

Your obedient servant,

PATRICK ABERCROMBIE



## THE ARCHITECT'S PLIGHT

*The following letter from the Honorary Secretary was addressed to "The Times." It was set in type but crowded out at the last minute.*

SIR,—The letter of the Director of Public Relations in your issue of 1 November appears to show that the popular misconception of architectural treatment for which, I fear, Ruskin must be held to be partly responsible still obtains in some circles. He, Ruskin, stated, in eloquent error, that only when a building had something useless added to it did it become architecture or anything more than mere building. Architects themselves in the past have done their part in the spreading of this doctrine.

The more modern view is that the architect in designing any building has two problems before him, the functional and the æsthetic, his purpose being to make the two indistinguishable. Hutments therefore demand appropriate architectural treatment as much as any other type of building. The grouping and layout on the site may make all the difference between an efficient, healthy camp and a potential hutment slum, while the reducing of proportion and mass to a sheer simplicity of construction is a work for which by training and experience the architect is peculiarly fitted. No architect belittles or despises such a problem for, be it said, the Parthenon itself, which has been invoked, proves when analysed to be merely the apotheosis of the hut.

May I assure General Beith that the profession is genuinely anxious to help him and other administrators in order that the national service shall lose nothing of whatever skill may be available? Certain departments have already placed the layouts of a few camps and temporary hospitals in outside architectural hands. It is suggested that this practice should be increased not only for military works but for the evacuation camps which are bound to come. Architects above a certain age are reserved for a national emergency which may yet come, but in the meantime both the profession and the national interest would benefit by a wider interpretation of the functions of the architect and his place in the mighty effort which the country is making.

I am, Sir, your obedient servant,  
W. H. ANSELL,  
Hon. Secretary, R.I.B.A.

## OFFICE ACCOMMODATION AT THE HOUSING CENTRE

*The Housing Centre,  
13 Suffolk Street, Haymarket,  
London, S.W.1*

*To the Editor, JOURNAL R.I.B.A.*

SIR,—A recent decision taken by the Executive Committee of the Housing Centre will be of interest to members of the architectural and town planning profession and other professional persons whose work is in some way connected with housing.

In order to ensure that accommodation at the Centre's premises, which is at present vacant, may be usefully occupied and to assist friends of the housing movement at a time when their specialised knowledge appears to be in less demand, we are prepared to offer a limited number of such persons the part use of an office and office services at purely nominal charges. In this way we hope to preserve our building as a Centre for those interested in housing and its related problems,

and at the same time assist our friends who would otherwise find it difficult to maintain a London address where they can keep in touch with their work and interests. They will find that the Centre itself is carrying on its normal activities in its own part of the building and is modifying them only so far as is necessary to suit war-time conditions. The library and information service and weekly discussion lunches are all being continued, and a special *ad hoc* committee is working on a programme for the collection of data and the promotion of research of the many problems which are urgent now and will also be involved in any peace-time reconstruction. It is hoped that this programme may be put into effect by an autonomous Council representing all the interested organisations.—Yours faithfully,

PATRICK ABERCROMBIE,  
*Chairman*

## THE CLAIMS OF PRIVATE ARCHITECTS

*Bowhill, Woodlands Avenue,  
Weybourne, Nr. Farnham,  
Surrey*

*23.11.39*

*To the Editor, JOURNAL R.I.B.A.*

DEAR SIR,—With reference to the letter from the Chairman of the A.A.S.T.A. in the R.I.B.A. JOURNAL of 20 November, I think it is generally acknowledged that the architect's assistant in public or Government employment is more secure in his prospects as compared with work in private offices. He is guaranteed continuity of work and superannuation, which is beyond the resources of the private practitioner. On the other hand Government or official architecture is liable to be stereotyped and often does not suit the temperament of a man with distinct original ideas. Official work is cramping in style and red tape channels have to be followed, otherwise there is delay, if not chaos.

Under war-time conditions the employees in official or Government departments are well founded, while many of those in private offices are now unemployed, due to suspension of building contracts. This war will come to an end one day, and then the problem of reconstruction will have to be faced. To meet this the Government should set up a Permanent Town Planning Commission to study the question in all its aspects. Town planning is now past the experimental stage, and many cities such as London are suffering from fatty degeneration of their arteries, which are the trunk roads. In the case of London, a scheme was suggested some years ago to build 40 satellite towns of 100,000 inhabitants each, within a 50-mile radius of Charing Cross, this number not to be exceeded by statute. Think how this would have helped evacuation!

Until the air menace is completely mastered, or a strong League of Nations set up able to abolish war, we must always be in a condition to meet future perils. Only the architectural profession with its specialised training can find a solution to these problems, and the Government should take full advantage of the present lull in building to plan for the future. If this were done it would absorb many architects who have little prospect at present.

Yours faithfully,  
J. E. RHIND [A.]  
*Dipl. Arch. Aber.*

## Notes

### MISLAID DIPLOMA OF MEMBERSHIP

Mr. H. V. Milnes Emerson has resigned his Associateship of the Royal Institute of British Architects on 10 July last. His resignation was accepted, and as from that date he has ceased to be a member of the Royal Institute.

Mr. Emerson has lost or mislaid his diploma of membership, and has thus been unable to return it to the Royal Institute in accordance with the Byelaws.

Anyone finding the certificate is requested to return it immediately to the Secretary, Royal Institute of British Architects, 66 Portland Place, W.1.

IAN MACALISTER,

*Secretary*

### APPOINTMENT OPEN, FIJI

The Crown Agents for the Colonies advertise the vacant appointment of an architect in the Public Works Department, Fiji. Candidates, aged 25-35, must hold an architectural

degree or diploma of a recognised university and/or have passed the A.R.I.B.A. examination.

Salary will be £F500 a year, rising by annual increments of £F25 to £F600 a year and thence, subject to passing an efficiency bar, rising by annual increments of £F30 to £F720 a year. The Fiji pound is linked with sterling at the rate of £111 Fiji to £100 sterling. Quarters or a comparable allowance are provided and passages to Fiji for the architect, his wife and one child.

The period of engagement is on agreement for four years in the first instance.

### LEAVE

Leave will be at the rate of four days in respect of each completed month of residential service.

Applicants should communicate with the Secretary of the R.I.B.A., from whom full particulars of the appointment can be had.

## Membership Lists

### ELECTION: JANUARY 1940

An election of candidates for membership will take place in January 1940. The names and addresses of the candidates, with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Byelaws are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Thursday, 21 December. The names following the applicant's address are those of his proposers.

#### AS FELLOWS (8)

COLLINS: HERBERT [J. 1926], 32 Carlton Crescent, Southampton; 38 Brookvale Road, Southampton. Lt. Col. R.F. Gutteridge.  
DARBYSHIRE: THOMAS SCHOFIELD [A. 1921], 43 Great Marlborough Street, W.1; 32 Netherhall Gardens, Hampstead, N.W.3. W. Lee Clarke, Thos. S. Tait and Charles H. Gage.

NICKSON: RICHARD SCHOLEFIELD, M.A.Cantab., A.A.Dip. [J. 1933], 1 Brunswick Street, Liverpool, 2; Hinderton Lodge, Neston, Cheshire. Herbert J. Rowse, Sir Arnold Thornely and Harold A. Dod.

RAINER: HERBERT THOMPSON [J. 1916], 29 Rodney Road, Cheltenham; Eden End, Charlton Kings, Cheltenham. H. Stratton Davis, C. W. Yates and Colonel N. H. Waller.

ROGERS: WILLIAM JELF [J. 1922], 29 Rodney Road, Cheltenham; Stow House, 53 Brooklyn Road, Cheltenham. H. Stratton Davis, C. W. Yates and Colonel N. H. Waller.

And the following Licentiate who have passed the qualifying Examination:—

BELCHAM: ALAN SYER, F.S.I., 63 Alexandra Road, Southend-on-Sea, Essex. Niel Martin-Kaye, D. H. Burles and Percy G. Hayward.

FORRESTER: ALFRED, Air Ministry, W.C.1; 24 Cross Path, Radlett, Herts. Arthur F. C. Bentley, Chas. E. Elcock and J. H. Horniman.

TWEEDIE: CHARLES EDWARD, 54 Frederick Street, Edinburgh; 48 Saughtonhall Drive, Edinburgh. J. R. McKay, Leslie Grahame Thomson and J. Inch Morrison.

#### AS ASSOCIATES (43)

The name of a school, or schools, after a candidate's name, indicates the passing of a recognised course.

ALMOND: ERIC, Dip.Arch. [Liverpool School of Architecture, University of Liverpool], 5 Oarside Drive, Wallasey, Cheshire. Prof. Lionel B. Budden, J. E. Marshall and Herbert Thearle.

BAKER: LAWRENCE FREDERICK [Bartlett School of Architecture, University of London], 70 Crowborough Road, S.W.17. Prof. A. E. Richardson, H. O. Corfiato and L. Stuart Stanley.

BINYON: ROGER BASIL, B.A.Cantab., Dip.Arch.Lond. [Cambridge University and the Bartlett School of Architecture, University of London], Hawthorndene, Hayes, Kent. Prof. A. E. Richardson, H. O. Corfiato and L. Stuart Stanley.

BROWN: GILBERT SMITH [Glasgow School of Architecture], Broadview, 28 Harling Drive, Troon, Ayrshire. T. Harold Hughes, William J. Smith and James Carrick.

BROWNE: ANTONY DOUGHTY, B.A.Cantab. [Cambridge University and the Architectural Association], 45 Apsley House, Finchley Road, N.W.8. G. A. Jellicoe, A. L. Farman and Prof. W. G. Newton.

BURKE: IAN DAVID, B.A.Hons.Arch., T.P.Dip. [Victoria University, Manchester], 9 Parkwood Road, Northenden, Manchester. Prof. R. A. Cordingley, C. Gustave Agate and G. Noel Hill.

CAMPBELL: JOHN INGLIS [Aberdeen School of Architecture, Robert Gordon's Technical College], Wellshill Terrace, Perth, Scotland. J. A. O. Allan, R. Leslie Rollo and James B. Nicol.

CHAPPELL: DENIS [Final], Old Timbers, Lovedean, Hants. Applying for nomination by the Council under the provisions of Byelaw 3 (d).

CHESTERTON: MISS ELIZABETH URSULA [Architectural Association], 12 The Mount, N.W.3. R. Furneaux Jordan, L. H. Bucknell and Arthur W. Kenyon.

DIAR: DWARKA NATH, Dip.Arch. [Bartlett School of Architecture, University of London], 119 Gower Street, W.C.1. Prof. A. E. Richardson, L. Stuart Stanley and H. O. Corfiato.

DOBSON: FRANCIS CECIL [King's College (Univ. of Durham)], Newcastle-upon-Tyne, 8 Lindale Road, Fenham, Newcastle-upon-Tyne 4. W. B. Edwards, Lt.-Col. A. K. Tasker and R. Norman Mackellar.

DUNBAR: FRANCIS BENSON [Glasgow Sch. of Architecture], 47 New Road, Ayt. James Carrick, James Lochhead and Alexander N. Paterson.

EVERITT: ROY LAYTON [University of Sheffield], "Waynflete," Devonshire Road, Retford, Notts. Stephen Welsh, E. H. Walker and J. Mansell Jenkinson.

FIELDEN: FRANK [Victoria University, Manchester], Old School House, Boarshurst Lane, Greenfield, nr. Oldham. Prof. R. A. Cordingley, G. Noel Hill and C. Gustave Agate.

- JORSYTH**: ROBERT JOHN [Glasgow School of Architecture], Valleyfield Ervie, Stranraer, Wigtownshire. James Carrick, A. G. Henderson and Col. G. Gardner McLean.
- JOY**: WILFRED WISHART [The Polytechnic, Regent Street, London], 17 Woodside Road, Bickley, Kent. Joseph Addison, Hugh G. Stanham and Hubert Lidbetter.
- GILL**: JOHN COLMAN, B.Arch.Hons. (L'pool) [University of Liverpool], Charney Hall, Grange-over-Sands, Lancs. Prof. Lionel B. Budden, F. N. Weightman and R. Mauchlen.
- GREENING**: CYRIL JOHN [The Polytechnic, Regent Street, London], 10 Linkside, New Malden, Surrey. Joseph Addison, W. R. Davidge and H. Lidbetter.
- HARRISON**: MICHAEL CHARLES [Bartlett School of Architecture, University of London], 117 Tennyson Road, Luton, Beds. Prof. A. E. Richardson, S. D. Meadows and applying for nomination by the Council under the provisions of Byelaw 3 (d).
- HEDLEY**: FRED [Special Final Examination], Grosvenor, Farnley Mount, Nevilles Cross, Durham City. F. Willey, Norman Richley and Percy L. Browne.
- HIRD**: JOHN GREENFELL [Glasgow School of Architecture], 41 Lilybrink Gardens, Glasgow, W.2. Eric A. Sutherland, T. Harold Hughes and William J. Smith.
- HOLLAND**: PETER [Bartlett Sch. of Architecture, University of London], 36 Belsize Grove, Hampstead, N.W.3. Prof. A. E. Richardson, H. O. Corfiato and H. Ingham Ashworth.
- HOWARTH**: THOMAS [Victoria University, Manchester], Royal Technical College, George Street, Glasgow, C.1. Prof. R. A. Cordingley, T. Harold Hughes and William J. Smith.
- JEREMIAH**: KEITH CHARLESWORTH, B.A.Arch. [Bartlett Sch. of Architecture, University of London], 2 Wrotesley Road, S.E.18. W. T. Curtis, David Robertson and H. W. Burchett.
- LANGTON**: DOUGLAS JOHN, Dip.Arch. (Leeds) [Leeds Sch. of Architecture], 5 Melrose Terrace, Savile Road, Elland Yorkshire. G. H. Foggitt, Wm. Illingworth and Eric Morley.
- LAWSON**: PETER DUNBAR, Dip.Arch. (Edin.) [Edinburgh College of Art], "Kinnoull," Redford Avenue, Colinton, Edinburgh. Sir Arnold Thornely, Joseph Louis Hampson and T. Aikman Swan.
- MAIN**: DAVID [Aberdeen School of Architecture, Robert Gordon's Technical College], 156 King Street, Aberdeen. R. Leslie Rollo, John G. Marr and James B. Nicol.
- MILLS**: DAVID HOPE [University of Liverpool], 19c Prince's Avenue, Liverpool 8. Prof. Lionel B. Budden, J. Ernest Marshall and Edward R. F. Cole.
- NORTON**: CHARLES ALFRED ROGER [Architectural Association], 14 Coombe Gardens, Wimbledon, S.W.20. Verner O. Rees, A. F. B. Anderson and G. A. Jellicoe.
- POWIS**: GEORGE JOSELYN, B.A. [University of Sheffield], 28 Wales Road, Kiveton Park, nr. Sheffield. Stephen Welsh, H. B. Leighton and H. B. S. Gibbs.
- REID**: JOHN TWEEDIE [Glasgow School of Architecture], 17 Grange Terrace, Kilmarnock, Ayrshire. T. Harold Hughes, William J. Smith and William Ross.
- RICHARDSON**: GUY STEWART [Architectural Association], Brook House, Tiptree, Essex. Jno. Stuart, G. A. Jellicoe and A. F. B. Anderson.
- ROWELL**: JAMES ROBERT CLUNIE [Glasgow School of Architecture], "Marsden," Ardayre Road, Prestwick, Ayrshire. T. Harold Hughes, A. G. Henderson and William J. Smith.
- RYAN**: MICHAEL [Architectural Association], Rybersdale, East Bergholt, Suffolk. R. Furneaux Jordan, Arthur W. Kenyon and John Murray Easton.
- SCANLON**: CHARLES ERNEST [Victoria University, Manchester], Elm House, Carlton Road, Whalley Range, Manchester. Prof. R. A. Cordingley, C. Gustave Agate and H. T. Seward.
- SINGLETON**: WILLIAM ADAM [Liverpool School of Architecture, University of Liverpool], 79 Claremount Road, Wallasey, Cheshire. Prof. Lionel B. Budden, J. Ernest Marshall and T. M. Alexander.
- STALEY**: MISS GRACE [Welsh School of Architecture, The Technical College, Cardiff], Education Architect's Office, Glanaber,

- Llangefni, Anglesey. W. S. Purchon, T. Alwyn Lloyd and Percy Thomas.
- TAYLOR**: THOMAS [Birmingham School of Architecture], 48 Phipson Road, Sparkhill, Birmingham 11. George Drysdale, William T. Benslyn and John B. Surman.
- VEREY**: DAVID CECIL WYNTER, M.A.Cantab. [Cambridge University and the Architectural Association], Barnsley Close, Cirencester. Herbert Passmore, Terence Carr and Hugh Braun.
- WALTERS**: ROGER TALBOT [Liverpool School of Architecture, University of Liverpool], Kedings, Little Cornard, Sudbury, Suffolk. Prof. Lionel B. Budden, Edward R. F. Cole and T. E. Marshall.
- WHEELER**: JOHN MARTIN [Architectural Association], "Redcourt," Lee-on-the-Solent, Hants. L. H. Bucknell, G. E. Kendall and R. Furneaux Jordan.
- WOOD**: LESLIE CHARLES [Final], 26 Poplar Grove, Maidstone, Kent. Niel Martin-Kaye, W. H. Robinson and S. H. Loweth.
- WYLIE**: HARRY [Edinburgh College of Art], 29 Barnton Gardens, Davidson's Mains, Edinburgh. A. A. Foote, T. Forbes MacLennan and F. C. Mears.

## AS LICENTIATES (7)

- ALCOCK**: EDWIN, Architect's Department, Surveyor's Office, Town Hall, Leigh, Lancs; 21 Beech Crescent, Leigh. Ernest Prestwich and the President and Hon. Secretary of the Manchester Society of Architects under the provisions of Byelaw 3 (a).
- GOLIGHTLY**: WILLIAM HENRY, c/o Messrs. Bromley, Cartwright and Waumsley, 6, Clarendon Street, Nottingham; 1 Linby Close, Sherwood, Nottingham. T. N. Cartwright, T. Cecil Howitt and A. E. Eberlin.
- LOBB**: HOWARD LESLIE VICARS, 19 The Butts, Brentford, Middlesex. Max R. Holler, Romilly B. Craze and George J. Skipper.
- SHREEVE**: PHILIP ALFRED, The Council House, Sutton Coldfield; 265 Branstone Road, Burton-on-Trent. John W. Wilson and the President and Secretary of the Birmingham and Five Counties A.A., under the provisions of Byelaw 3 (a).
- SLOGGETT**: HAROLD JOHN, Messrs. Barrow & Rooke, 1 Sussex Terrace, Plymouth; "Carlisle," Stanbury Avenue, Great Berry Estate, Crownhill, Plymouth. H. L. Thornely, J. Leighton Fouracre and E. U. Channon.
- SMITH**: GEORGE ALFRED WILLIAM, 28 Woodland Rise, Greenford, Middlesex. G. Blair Imrie, Hugh H. Scott-Willey and Horace C. Fread.
- WILCOX**: JOHN WALLACE, 7 New Square, Lincoln's Inn, W.C.2; 19 St. George's Road, N.W.11. W. E. Watson, L. Rome Guthrie and W. B. Simpson.

## ELECTION: APRIL 1940

An election of candidates for membership will take place in April 1940. The names and addresses of the overseas candidates, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Monday, 4 March 1940. The names following the applicant's address are those of his proposers.

## AS FELLOW (1)

The following Licentiate has passed the qualifying Examination: **BLOMFIELD**: FRANCIS BERRINGTON, Prem House, Connaught Place, New Delhi, India; 1A Prithviraj Road, New Delhi. Sir Banister Fletcher, John P. Bishop and Henry A. N. Medd.

## AS ASSOCIATES (2)

**HOPKINS**: RHYE EVAN [Passed a qualifying Examination appd. by the Royal Australian Inst. Arch.], 312 Flinders Lane, Melbourne, Australia. P. H. Meldrum, Charles E. Serpell and Percy A. Oakley.

**OSLER**: GEORGE CECIL [University of Cape Town], Reity Street, Robertson, Cape Province, James Morris, H. J. Brownlee, and Prof. L. W. Thornton White.

## Notices

### ASSOCIATES AND THE FELLOWSHIP

Associates who are eligible and desirous of transferring to the Fellowship are reminded that if they wish to take advantage of the election to take place in February 1940 (overseas candidates May 1940) they should send the necessary nomination forms to the Secretary R.I.B.A. not later than Saturday, 23 December 1939.

### THE USE OF TITLES BY MEMBERS OF THE ROYAL INSTITUTE

In view of the passing of the Architects Registration Act 1938, members whose names are on the Statutory Register are advised to make use simply of the title "Chartered Architect" after the R.I.B.A. affix. The description "Registered Architect" is no longer necessary.

Members who are qualified for registration and have not already done so are reminded of the importance of applying for such registration without delay. Full particulars will be sent on application to the Secretary R.I.B.A.

### PROFESSIONAL ADVERTISING

The attention of the Practice Committee has been drawn to the fact that the publishers of certain journals are approaching architects for details of their professional activities, which the publishers propose to embody in the editorial columns of their journals. In the case of one particular firm of publishers, several members forwarded to the Institute the proposed article as drafted by the editor and sent to the architects for any additions or amendments the architects desire. In each case the wording of the articles is identical, with the exception of the names and addresses of the firms of architects to whom they were sent.

The Committee desire to warn members generally against this undesirable form of publicity. The acceptance by members of invitations of this nature from firms of publishers is, in the opinion of the Committee, directly contrary to the Code of Professional Practice and tantamount to advertising.

## Competitions

The Council and Competitions Committee wish to remind members and members of Allied Societies that it is their duty to refuse to take part in competitions unless the conditions are in conformity with the R.I.B.A. Regulations for the Conduct of Architectural Competitions and have been approved by the Institute.

While, in the case of small limited private competitions, modifications of the R.I.B.A. Regulations may be approved, it is the duty of members who are asked to take part in a limited competition to notify the Secretary of the R.I.B.A. immediately, submitting particulars of the competition. This requirement now forms part of the Code of Professional Practice in which it is ruled that a formal invitation to two or more architects to prepare designs in competition for the same project is deemed a limited competition.

### AUCKLAND, NEW ZEALAND: NEW CATHEDRAL

The General Trust Board of the Diocese of Auckland invite members of the New Zealand Institute of Architects resident in New Zealand or overseas to submit in competition designs for a new Cathedral.

Assessor: Sir Giles Gilbert Scott, R.A. [F.].

Premiums: £1,000, £400, £200 and £100.

Last day for questions: 31 May 1939.

Owing to the outbreak of war it has been necessary to postpone the adjudication. Competitors in England are granted an extension of time until 15 December 1939 to send in designs.

Conditions of the competition may be obtained on application to (a) The General Trust Board, P.O. Box 652, Auckland, New Zealand, or (b) The Secretary R.I.B.A., 66 Portland Place, London, W.1. Deposit £1 1s.

## MEMBERS' COLUMN

*Owing to limitation of space, notices in this column are restricted to changes of address, partnerships vacant or wanted, practices for sale or wanted, office accommodation, and appointments vacant. Members are reminded that a column in the Advertisement Section of the Journal is reserved for the advertisements of members seeking appointments in architects' offices. No charge is made for such insertions and the privilege is confined to members who are definitely unemployed.*

*A list of members seeking positions with prospects of partnership is kept at the office of the R.I.B.A. and members who are desirous of having their names placed on this list are requested to send particulars of their qualifications, age, etc., to the Secretary R.I.B.A.*

### CORRECTION IN ADDRESS

THE office address of Mr. Eric Francis [F.] is Midland Bank Chambers, North Street, Taunton. Telephone No.: Taunton 2320.

### CHANGE OF ADDRESS

As from 18 December 1939, Messrs. Ley, Colbeck & Partners [FF.], will be practising from Palmerston House, 51 Bishopsgate, E.C.2.

### TERMINATION OF PARTNERSHIP

MESSRS. H. V. ASHLEY & WINTON NEWMAN [FF.], of 14 Gray's Inn Square, London, W.C.1, inform us that the association of Mr. W. Naseby Adams with their firm has been terminated by mutual consent. Messrs. H. V. Ashley & Winton Newman's emergency address is 100 Froggnal, Hampstead, N.W.3. Telephone No.: Hampstead 4035.

### DISSOLUTION OF PARTNERSHIP

MR. P. T. WILSDON [F.] and Mr. G. W. North [F.], of Townsend House, Greycoat Place, S.W.1, have dissolved their partnership as from 2 November 1939. Mr. North will continue his practice under the style of North and Partners from the same address.

### OFFICE ACCOMMODATION TO LET

DEVON, for duration of war. Architect's Office (two rooms) in quiet seaside town, £1 5s. per week, including rates, central heating, caretaker and light, also use of furniture.—Apply Box 2311, c/o Secretary R.I.B.A.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expressions of the Institute.

Members sending remittances by postal order for subscriptions of Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A. and crossed.

Members wishing to contribute notices or correspondence must send them addressed to the Editor not later than the Tuesday prior to the date of publication.

Back numbers of the JOURNAL can be obtained at the price of 1s. 6d., including postage throughout the world. For orders of more than six copies discounts are given. Orders must be prepaid.



to  
are  
to

ca-  
nd,  
nd

ages  
ffice  
at a  
ver-  
arge-  
are

cept  
their  
aca-

nk  
20,

ers  
ite,

y's  
of  
by  
n's  
me

nd  
as  
ice

in  
ag,  
o

nd  
he  
ve

ns  
th  
at,  
A.

st  
or

of  
oi  
.